

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0623-3277  
4310 Carthage Road West End

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I59129383 thru I59129415

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



June 23, 2023

Gilbert, Eric

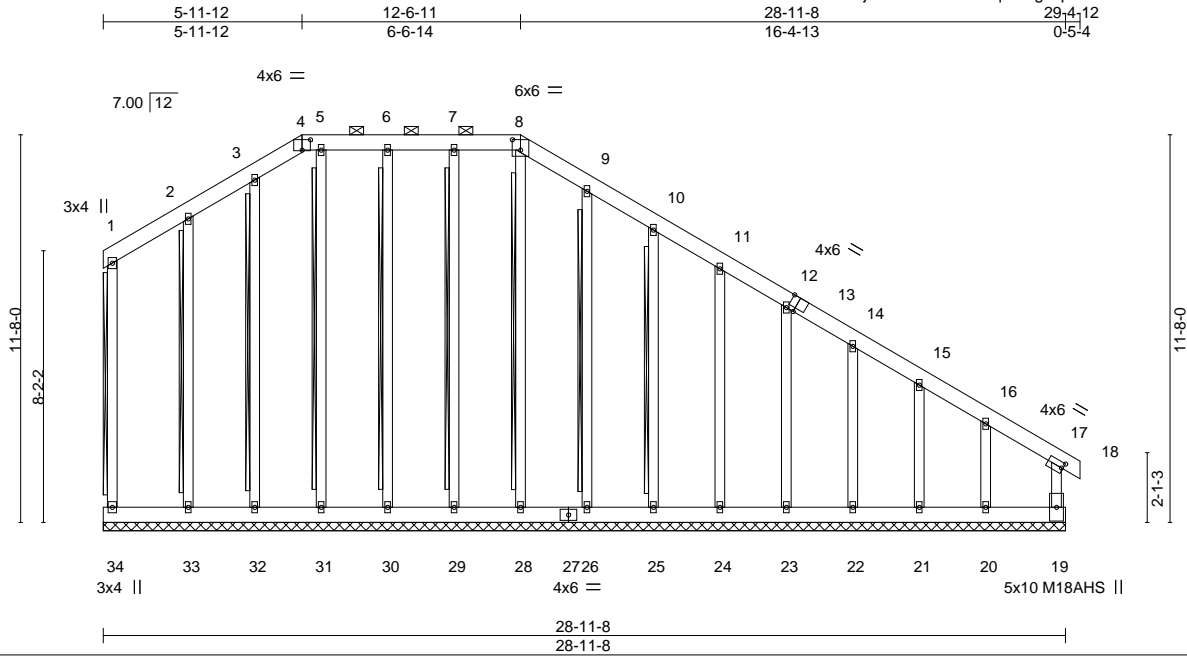
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job J0623-3277	Truss A1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129383
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:46 2023 Page 1

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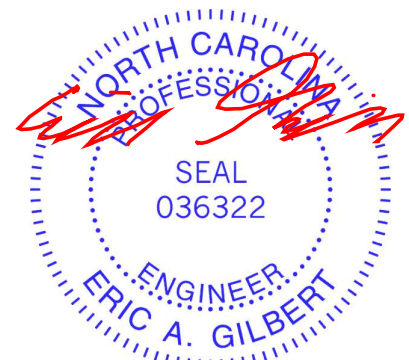
Plate Offsets (X, Y)--	[4:0-3-0,0-3-12], [8:0-3-0,0-3-12], [13:0-2-9,Edge], [17:0-0-9,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.00 17 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) 0.00 17 n/r 120	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 19 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 314 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 1-34, 8-28, 7-29, 6-30, 5-31, 3-32, 2-33, 9-26, 10-25
OTHERS 2x4 SP No.2	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 28-11-8.  
 (lb) - Max Horz 34=369(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 34, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 22 except 19=244(LC 11), 20=543(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 34, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 22, 21 except 19=514(LC 13), 20=398(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 15-16=-290/195, 16-17=-469/299, 17-19=-316/181  
 BOT CHORD 33-34=-231/363, 32-33=-231/363, 31-32=-231/363, 30-31=-231/363, 29-30=-231/363, 28-29=-231/363, 26-28=-231/363, 25-26=-231/363, 24-25=-231/363, 23-24=-231/363, 22-23=-231/363, 21-22=-231/363, 20-21=-231/363, 19-20=-231/363  
 WEBS 16-20=-289/329

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-4 to 4-6-11, Exterior(2) 4-6-11 to 5-11-12, Corner(3) 5-11-12 to 10-6-11, Exterior(2) 10-6-11 to 12-6-11, Corner(3) 12-6-11 to 16-11-8, Exterior(2) 16-11-8 to 29-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable requires continuous bottom chord bearing.
  - 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 9) Gable studs spaced at 2-0-0 oc.
  - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 11) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34, 28, 29, 30, 25, 24, 23, 22 except (it=lb) 19=244, 20=543.



Job J0623-3277	Truss A1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129383 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:46 2023 Page 2  
ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

**NOTES-**

- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



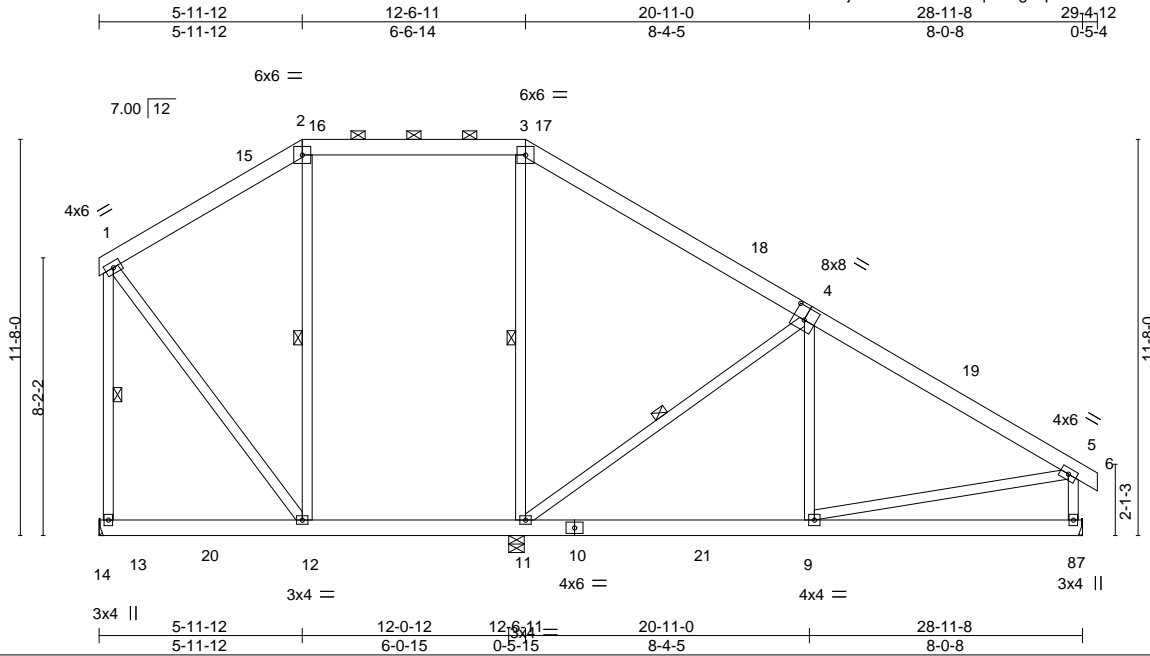
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss A2	Truss Type PIGGYBACK BASE	Qty 4	Ply 1	4310 Carthage Road West End I59129384
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:47 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:67.8

Plate Offsets (X,Y)--	[4:0-4-0,0-4-8]
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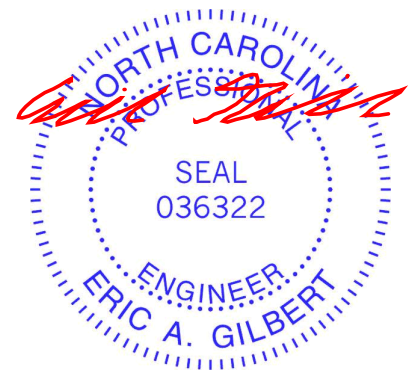
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.03 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -0.04 8-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.01 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01 12 >999 240	Weight: 240 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 2-12, 3-11, 4-11, 1-13

**REACTIONS.** (size) 11=0-5-8, 13=Mechanical, 8=Mechanical  
 Max Horz 13=249(LC 13)  
 Max Uplift 11=150(LC 13), 13=39(LC 12)  
 Max Grav 11=982(LC 20), 13=894(LC 19), 8=875(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-425/155, 2-3=-338/197, 3-4=-527/161, 4-5=-962/150, 1-13=-749/216, 5-8=-802/194  
 BOT CHORD 11-12=-95/427, 9-11=-4/777  
 WEBS 3-11=-328/186, 4-11=-689/251, 1-12=-81/530, 5-9=0/711

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 5-11-12, Exterior(2) 5-11-12 to 12-2-7, Interior(1) 12-2-7 to 12-6-11, Exterior(2) 12-6-11 to 18-9-6, Interior(1) 18-9-6 to 29-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 11=150.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p><b>ENGINEERING BY</b>  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0623-3277	Truss B1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129385
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:49 2023 Page 1

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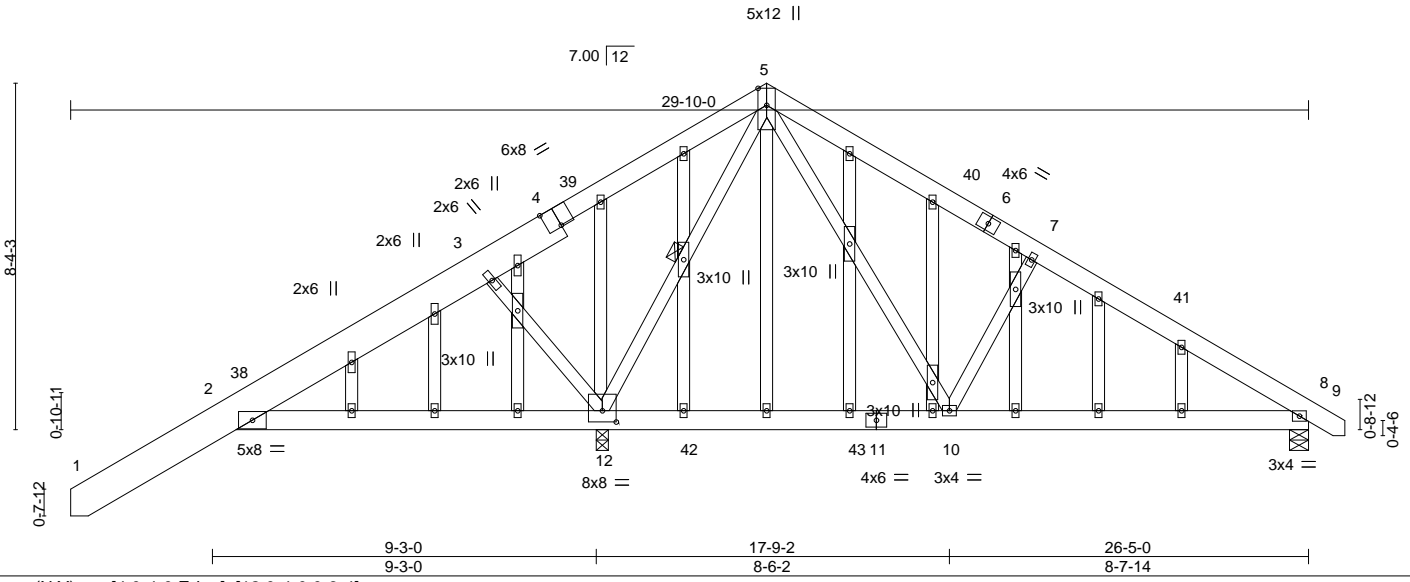


Plate Offsets (X, Y)--	[4:0-4-0,Edge], [12:0-4-0,0-3-4]
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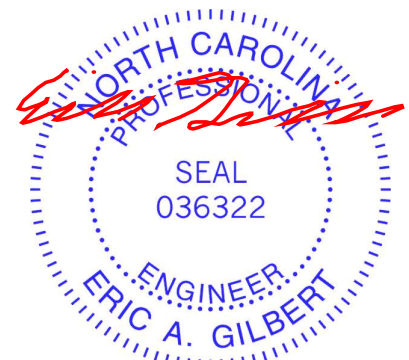
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.07 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.09 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 8-10 >999 240	Weight: 271 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-12
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 8=0-5-8, 12=0-3-8  
 Max Horz 12=277(LC 11)  
 Max Uplift 8=-146(LC 13), 12=-488(LC 12)  
 Max Grav 8=571(LC 24), 12=1958(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-538/962, 3-5=-517/1225, 5-7=-510/274, 7-8=-610/219  
 BOT CHORD 2-12=-759/665, 10-12=-375/383, 8-10=-148/454  
 WEBS 3-12=-549/338, 5-12=-1585/658, 5-10=-210/740, 7-10=-441/318

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -3-2-7 to 1-2-5, Interior(1) 1-2-5 to 13-4-4, Exterior(2) 13-4-4 to 17-9-1, Interior(1) 17-9-1 to 27-1-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=146, 12=488.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss B2	Truss Type COMMON	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129386
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:50 2023 Page 1

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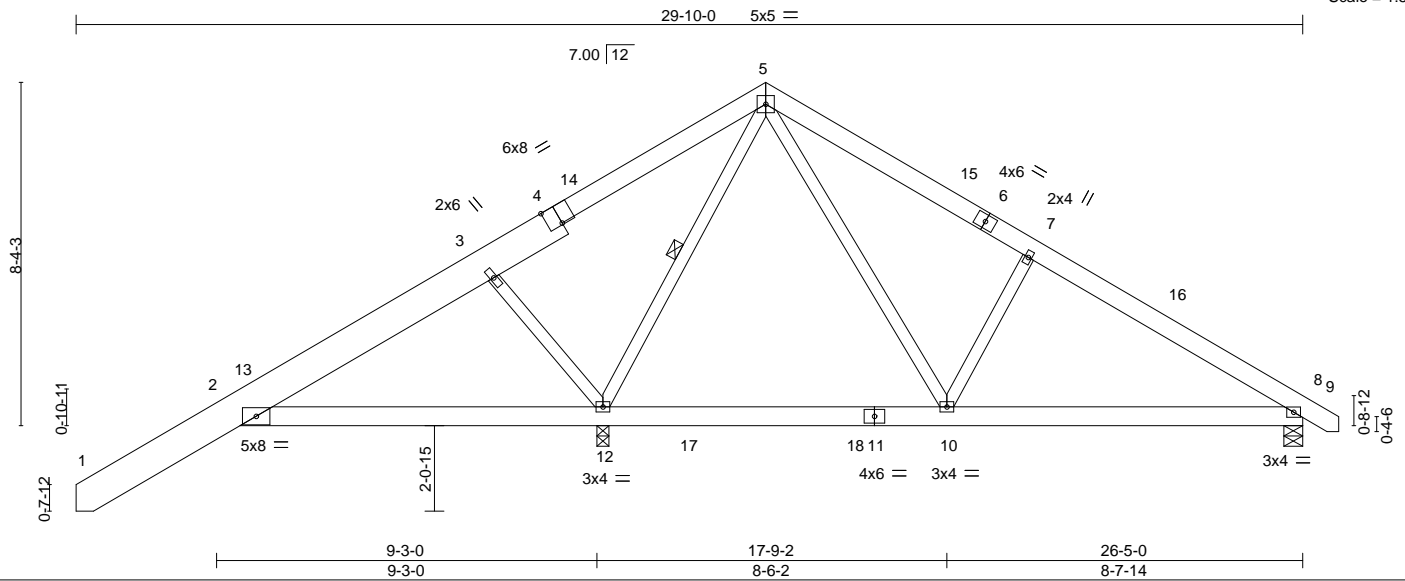


Plate Offsets (X,Y)--	[4:0-4-0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	-0.07 10-12	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.09 10-12	>999	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	-0.00 8	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02 8-10	>999	240
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 204 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-12

**REACTIONS.** (size) 12=0-3-8, 8=0-5-8  
 Max Horz 12=222(LC 11)  
 Max Uplift 12=176(LC 12), 8=60(LC 13)  
 Max Grav 12=1944(LC 19), 8=571(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-538/962, 3-5=-517/1225, 5-7=-510/274, 7-8=-610/219  
 BOT CHORD 2-12=-759/665, 10-12=-375/383, 8-10=-148/454  
 WEBS 3-12=-549/265, 5-12=-1585/658, 5-10=-144/725, 7-10=-441/256

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -3-2-7 to 1-2-5, Interior(1) 1-2-5 to 13-4-4, Exterior(2) 13-4-4 to 17-9-1, Interior(1) 17-9-1 to 27-1-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 12=176.



Job J0623-3277	Truss B3	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End 159129387
Comtech, Inc. Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:52 2023 Page 1  
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0-10-8 9-9-8 19-2-11 24-5-4 30-9-14 37-6-0 38-4-8  
 0-10-8 9-9-8 9-5-3 5-2-9 6-4-10 6-8-2 0-10-8

Scale = 1:67.5

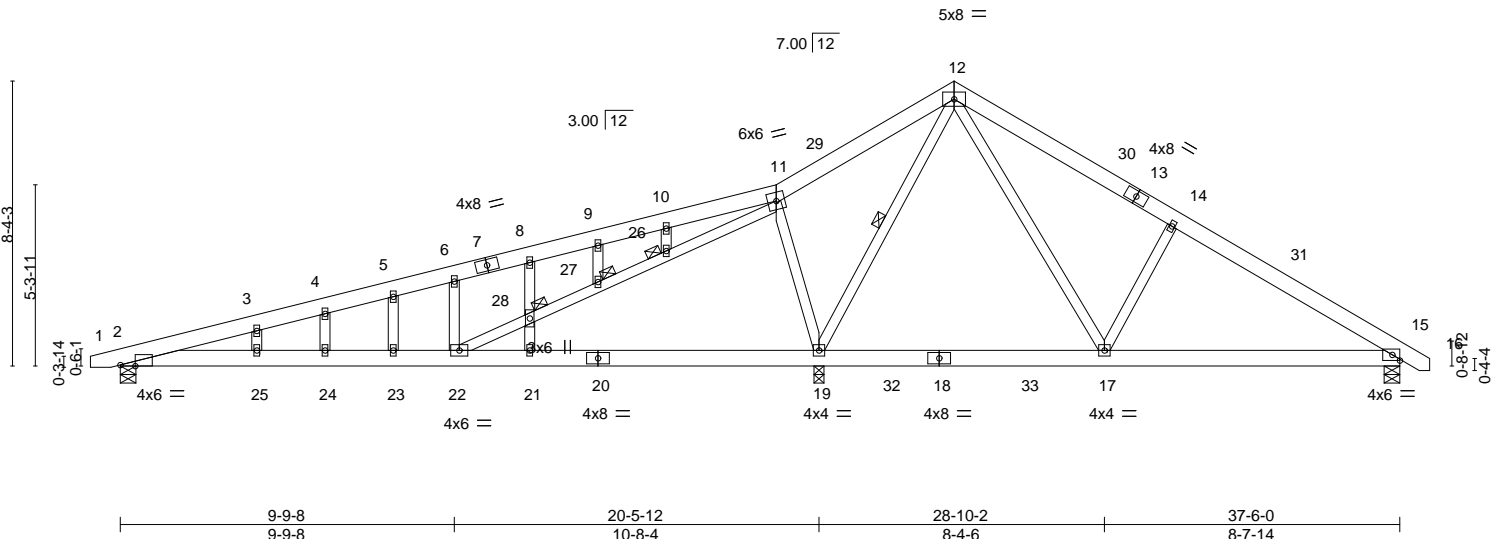


Plate Offsets (X, Y)-- [2:0-5-4,Edge]	9-9-8 9-9-8	20-5-12 10-8-4	28-10-2 8-4-6	37-6-0 8-7-14
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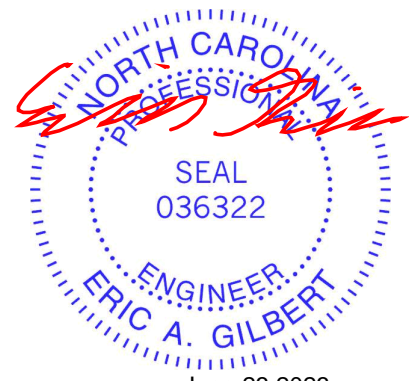
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(LL) -0.09 24 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.54	Vert(CT) -0.19 24-25 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 15 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 24-25 >999 240	Weight: 257 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 12-19
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 26, 27, 28

**REACTIONS.** (size) 2=0-5-8, 19=0-3-8, 15=0-5-8  
 Max Horz 2=257(LC 11)  
 Max Uplift 2=-210(LC 8), 19=-468(LC 12), 15=-182(LC 13)  
 Max Grav 2=648(LC 23), 19=1953(LC 1), 15=576(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1156/298, 3-4=-1113/325, 4-5=-1092/339, 5-6=-1074/361, 6-8=-1164/401,  
 8-9=-1120/435, 9-10=-1102/444, 10-11=-1117/471, 11-12=-183/930, 12-14=-488/287,  
 14-15=-628/224  
 BOT CHORD 2-25=-327/1072, 24-25=-327/1072, 23-24=-327/1072, 22-23=-327/1072, 21-22=-595/290,  
 19-21=-595/290, 17-19=-251/268, 15-17=-78/459  
 WEBS 6-22=-467/140, 22-28=-619/1865, 27-28=-593/1809, 26-27=-600/1822, 11-26=-633/1907,  
 11-19=-601/338, 12-19=-1305/259, 12-17=-205/729, 14-17=-435/316

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-15 to 4-0-0, Interior(1) 4-0-0 to 24-5-4, Exterior(2) 24-5-4 to 28-10-1, Interior(1) 28-10-1 to 38-2-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=210, 19=468, 15=182.

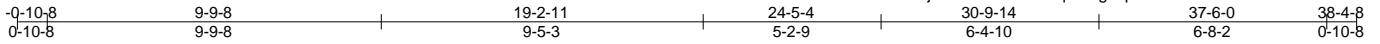


Job J0623-3277	Truss B4	Truss Type ROOF SPECIAL	Qty 3	Ply 1	4310 Carthage Road West End 159129388
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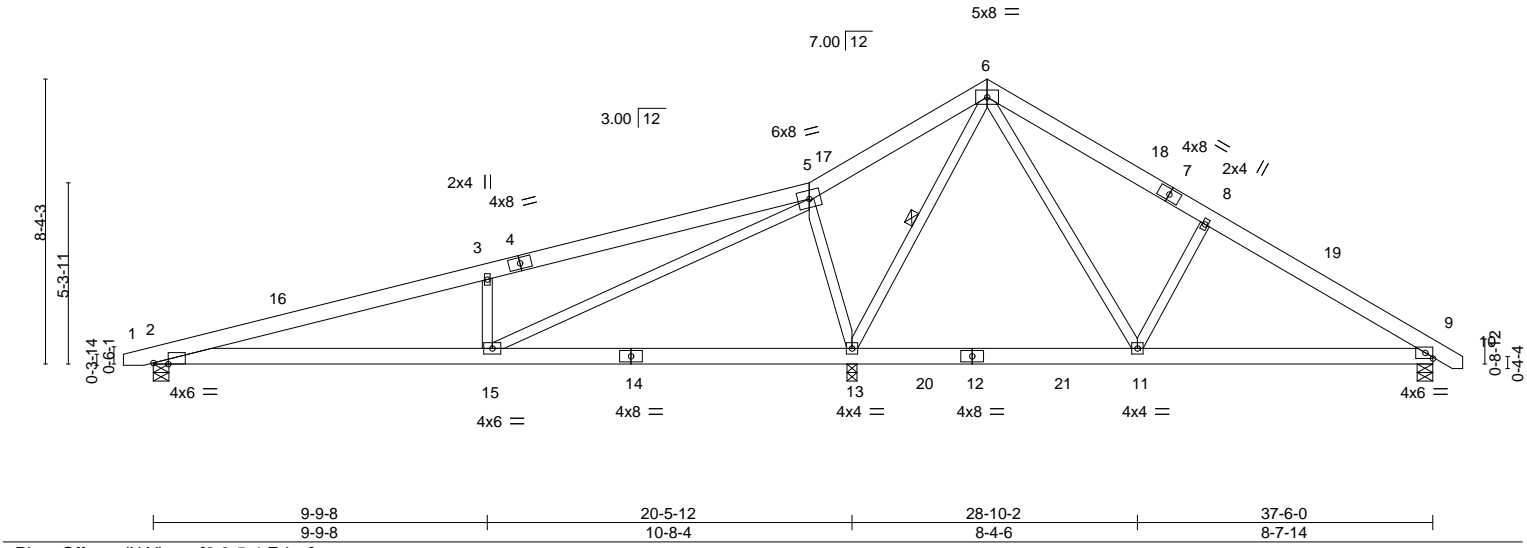
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:53 2023 Page 1

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Scale = 1:67.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.08 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.16 2-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.00 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06 2-15	>999	240	Weight: 245 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x4 SP No.2	WEBS 10-0-0 oc bracing: 2-15.
	WEBS 1 Row at midpt 6-13

**REACTIONS.** (size) 2=0-5-8, 13=0-3-8, 9=0-5-8  
Max Horz 2=193(LC 11)  
Max Uplift 2=-95(LC 8), 13=-161(LC 12), 9=-80(LC 13)  
Max Grav 2=632(LC 23), 13=1989(LC 1), 9=565(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1130/194, 3-5=-1142/295, 5-6=-57/985, 6-8=-446/183, 8-9=-595/130  
BOT CHORD 2-15=-116/1034, 13-15=-647/224, 11-13=-285/186, 9-11=-62/443  
WEBS 3-15=-634/297, 5-15=-375/1873, 5-13=-605/275, 6-13=-1350/242, 6-11=-137/720,  
8-11=-437/248

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-15 to 3-9-14, Interior(1) 3-9-14 to 24-5-4, Exterior(2) 24-5-4 to 28-10-1, Interior(1) 28-10-1 to 38-2-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9 except (jt=lb) 13=161.





Job J0623-3277	Truss B5	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End 159129389
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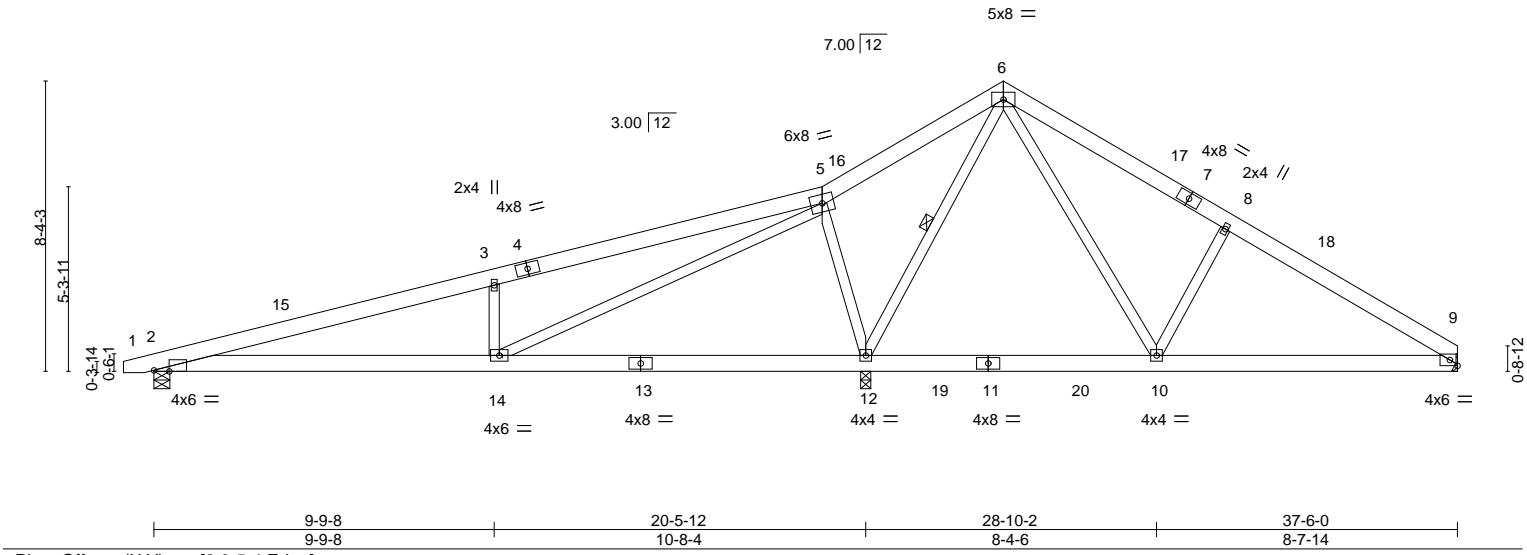
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:54 2023 Page 1

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Scale = 1:66.3



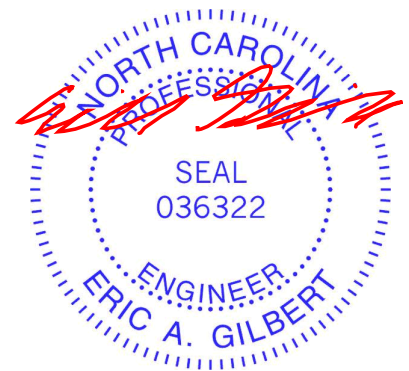
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.08 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.16 2-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.00 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06 2-14	>999	240	Weight: 243 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x4 SP No.2	10-0-0 oc bracing: 2-14.
	WEBS 1 Row at midpt 6-12

**REACTIONS.** (size) 2=0-5-8, 12=0-3-8, 9=Mechanical  
 Max Horz 2=191(LC 9)  
 Max Uplift 2=-94(LC 8), 12=-161(LC 12), 9=-66(LC 13)  
 Max Grav 2=631(LC 23), 12=1997(LC 1), 9=512(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1129/191, 3-5=-1141/291, 5-6=-58/990, 6-8=-457/185, 8-9=-603/131  
 BOT CHORD 2-14=-117/1033, 12-14=-652/222, 10-12=-285/184, 9-10=-59/459  
 WEBS 3-14=-634/297, 5-14=-374/1874, 5-12=-604/274, 6-12=-1360/245, 6-10=-141/737,  
 8-10=-446/254

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-15 to 3-9-14, Interior(1) 3-9-14 to 24-5-4, Exterior(2) 24-5-4 to 28-10-1, Interior(1) 28-10-1 to 37-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9 except (jt=lb) 12=161.



Job J0623-3277	Truss B6	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End 159129390
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:56 2023 Page 1

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Scale = 1:66.3

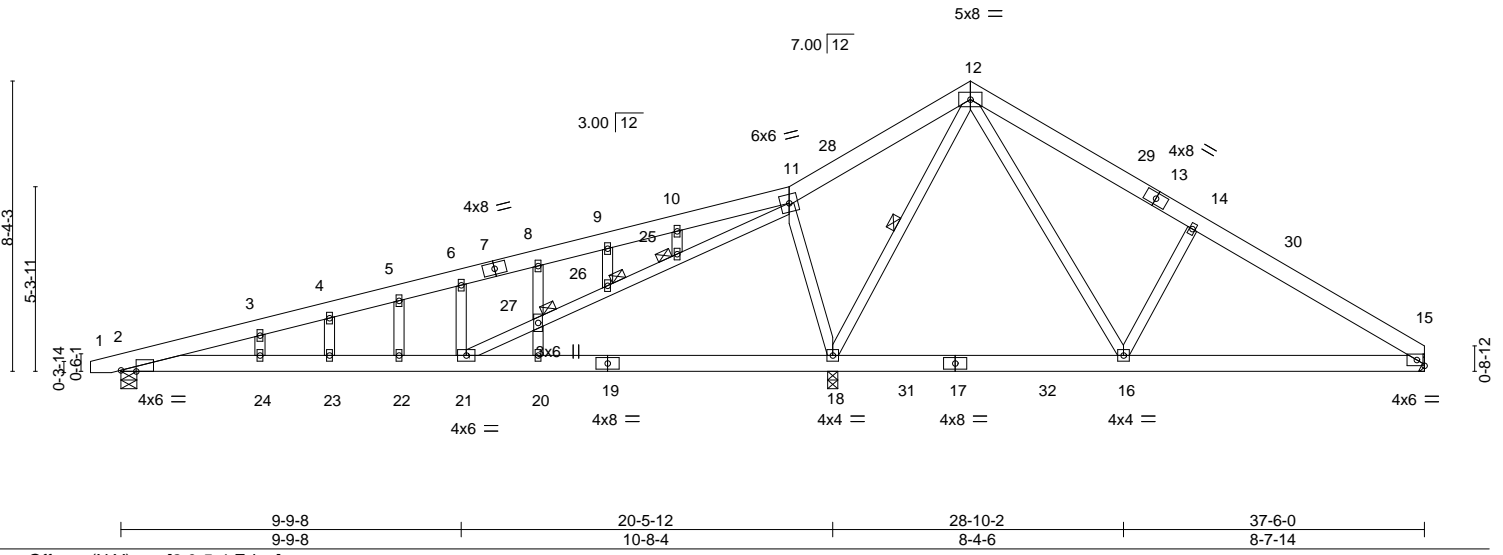


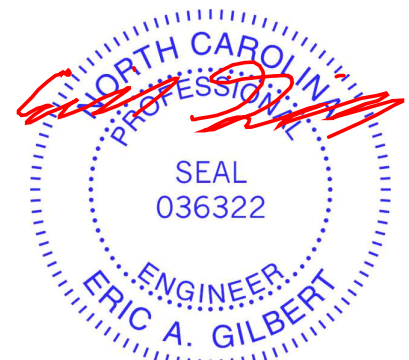
Plate Offsets (X, Y)-- [2:0-5-4, Edge]	9-9-8 9-9-8	20-5-12 10-8-4	28-10-2 8-4-6	37-6-0 8-7-14
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b> <b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.09 23 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.19 23-24 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.01 15 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11 23-24 >999 240	Weight: 255 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 12-18
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 25, 26, 27

**REACTIONS.** (size) 2=0-5-8, 18=0-3-8, 15=Mechanical  
 Max Horz 2=255(LC 11)  
 Max Uplift 2=-210(LC 8), 18=-469(LC 12), 15=-155(LC 13)  
 Max Grav 2=648(LC 23), 18=1961(LC 1), 15=525(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1154/296, 3-4=-1111/323, 4-5=-1091/338, 5-6=-1073/360, 6-8=-1163/399,  
 8-9=-1119/434, 9-10=-1101/442, 10-11=-1116/470, 11-12=-185/935, 12-14=-499/289,  
 14-15=-624/227  
 BOT CHORD 2-24=-328/1070, 23-24=-328/1070, 22-23=-328/1070, 21-22=-328/1070, 20-21=-599/288,  
 18-20=-599/288, 16-18=-251/266, 15-16=-91/475  
 WEBS 6-21=-467/140, 21-27=-619/1866, 26-27=-593/1809, 25-26=-599/1823, 11-25=-633/1907,  
 11-18=-601/338, 12-18=-1316/260, 12-16=-211/748, 14-16=-444/326

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-6-15 to 4-0-0, Interior(1) 4-0-0 to 24-5-4, Exterior(2) 24-5-4 to 28-10-1, Interior(1) 28-10-1 to 37-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=210, 18=469, 15=155.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss B7	Truss Type COMMON	Qty 7	Ply 1	4310 Carthage Road West End Job Reference (optional)	159129391
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:42:57 2023 Page 1

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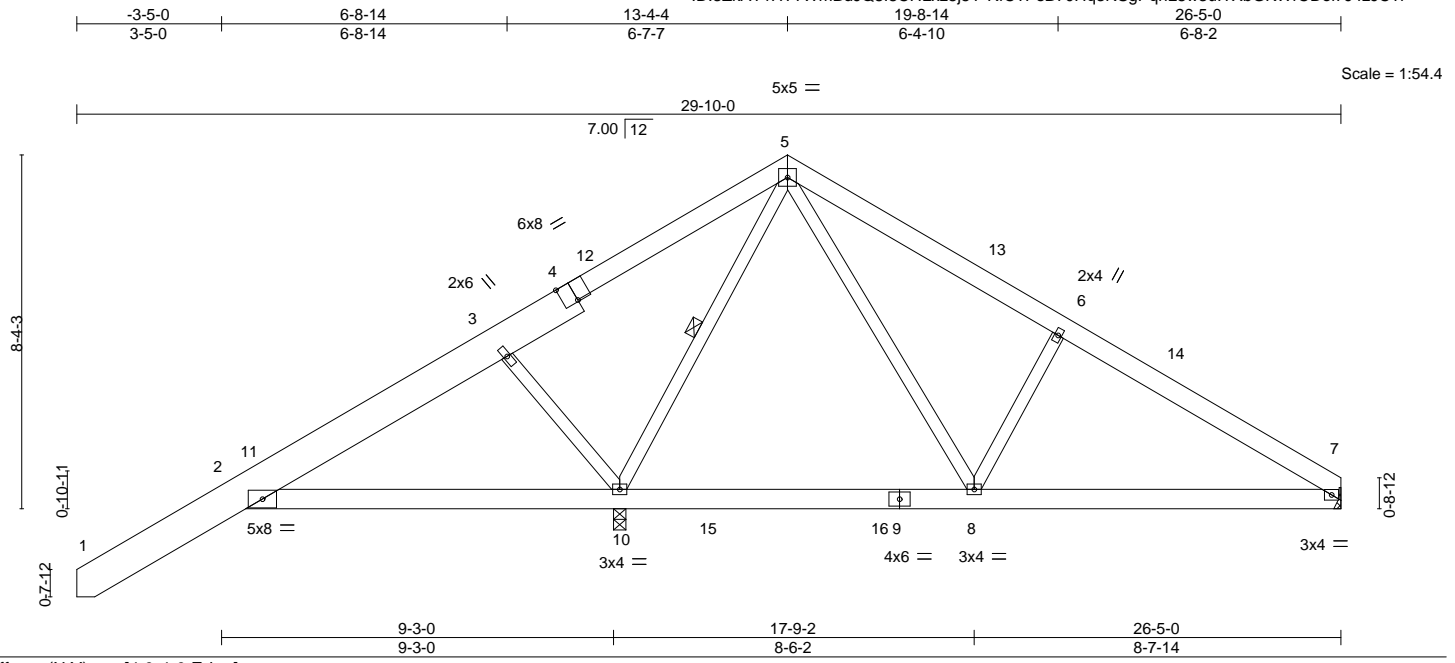


Plate Offsets (X, Y)--	[4:0-4-0, Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.08 8-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Vert(CT) -0.09 8-10 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 7-8 >999 240	Weight: 202 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-10

**REACTIONS.** (size) 7=Mechanical, 10=0-3-8  
 Max Horz 10=220(LC 9)  
 Max Uplift 7=-47(LC 13), 10=-175(LC 12)  
 Max Grav 7=519(LC 24), 10=1948(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-538/962, 3-5=-517/1225, 5-6=-524/271, 6-7=-617/215  
 BOT CHORD 2-10=-759/664, 8-10=-376/378, 7-8=-145/471  
 WEBS 3-10=-550/265, 5-10=-1590/656, 5-8=-145/742, 6-8=-448/261

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -3-2-7 to 1-2-5, Interior(1) 1-2-5 to 13-4-4, Exterior(2) 13-4-4 to 17-9-1, Interior(1) 17-9-1 to 26-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 10=175.



Job J0623-3277	Truss B8	Truss Type COMMON	Qty 2	Ply 1	4310 Carthage Road West End Job Reference (optional)	159129392
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Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Jun 23 12:31:28 2023 Page 1  
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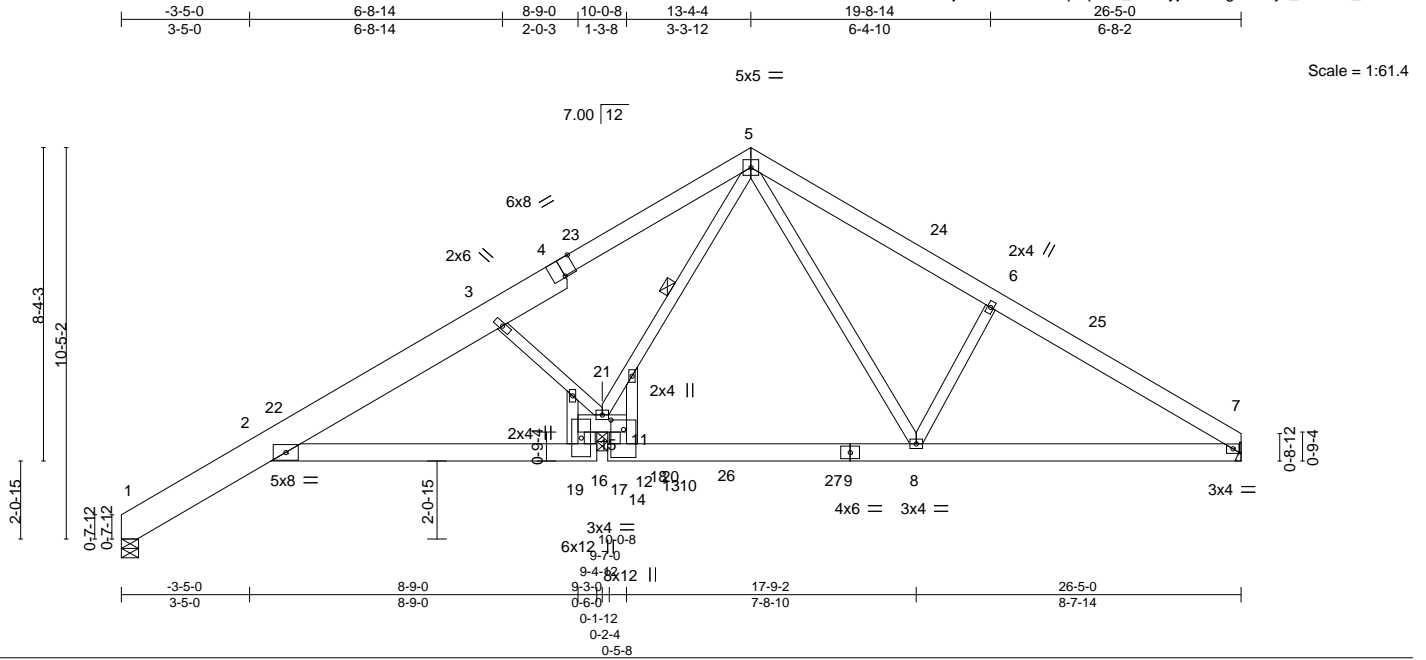


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [12:0-3-0,0-4-0]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.05 8-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.08 7-8 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) -0.02 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 2 >999 240		
				Weight: 208 lb	FT = 20%

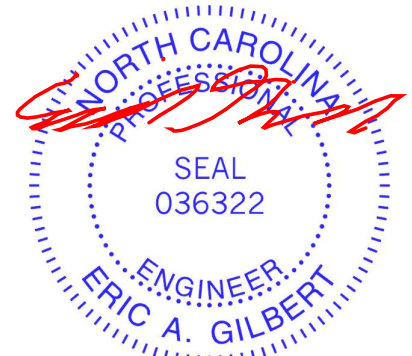
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-15

**REACTIONS.** All bearings 0-3-8 except (jt=length) 7=Mechanical, 1=0-5-8.  
 (lb) - Max Horz 15=233(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 7, 1 except 12=199(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 7=573(LC 24), 15=1591(LC 1), 1=276(LC 23), 12=685(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-22=0/394, 3-4=0/564, 4-23=0/615, 5-23=0/768, 5-24=496/249, 6-24=560/214,  
 6-25=-554/193, 7-25=-719/169  
 BOT CHORD 7-8=65/558  
 WEBS 3-21=-637/311, 15-21=-650/315, 15-20=-1107/47, 5-20=-1181/164, 5-8=-134/719,  
 6-8=439/250, 15-17=-473/0, 12-13=-586/0, 10-11=0/831, 18-19=0/662

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -3-2-4 to 1-2-9, Interior(1) 1-2-9 to 13-4-4, Exterior(2) 13-4-4 to 17-9-1, Interior(1) 17-9-1 to 26-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 1 except (jt=lb) 12=199.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



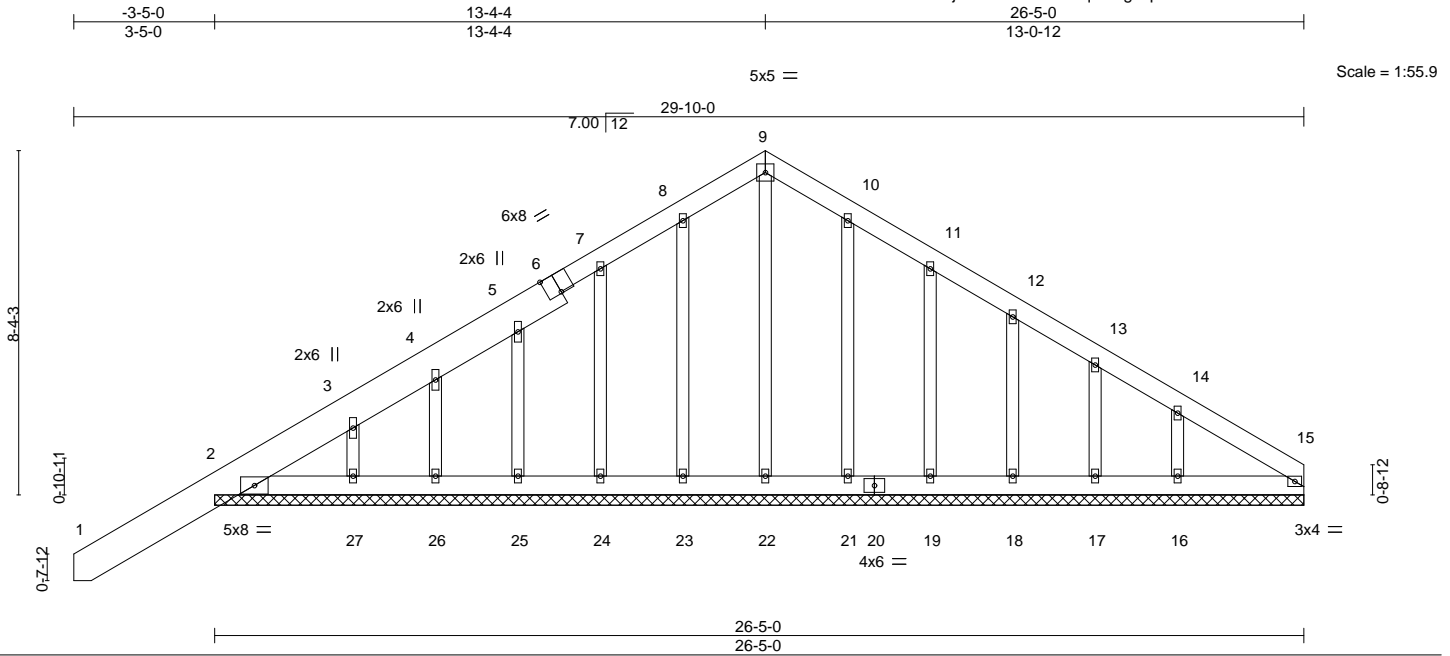
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss B9	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129393
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:00 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwrcDoi7J4zJC?f



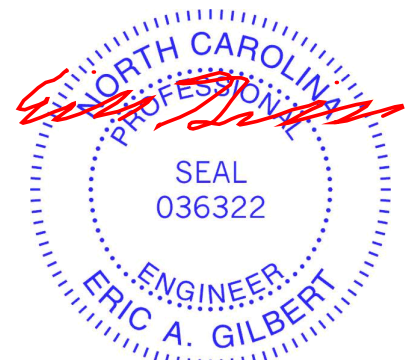
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	15	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S								
											Weight: 232 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1 *Except* 1-6: 2x10 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.2		

**REACTIONS.** All bearings 26-5-0.  
 (lb) - Max Horz 2=275(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 27, 21, 19, 18, 17 except 2=135(LC 12),  
 26=102(LC 12), 16=134(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 15, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17 except 2=525(LC  
 1), 16=274(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -3-2-7 to 1-2-5, Exterior(2) 1-2-5 to 13-4-4, Corner(3) 13-4-4 to 17-9-1, Exterior(2) 17-9-1 to 26-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 27, 21, 19, 18, 17 except (jt=lb) 2=135, 26=102, 16=134.



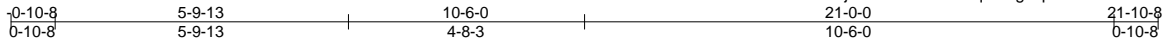
June 23, 2023

Job J0623-3277	Truss C1	Truss Type KINGPOST	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129394
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Comtech, Inc. Fayetteville, NC - 28314,

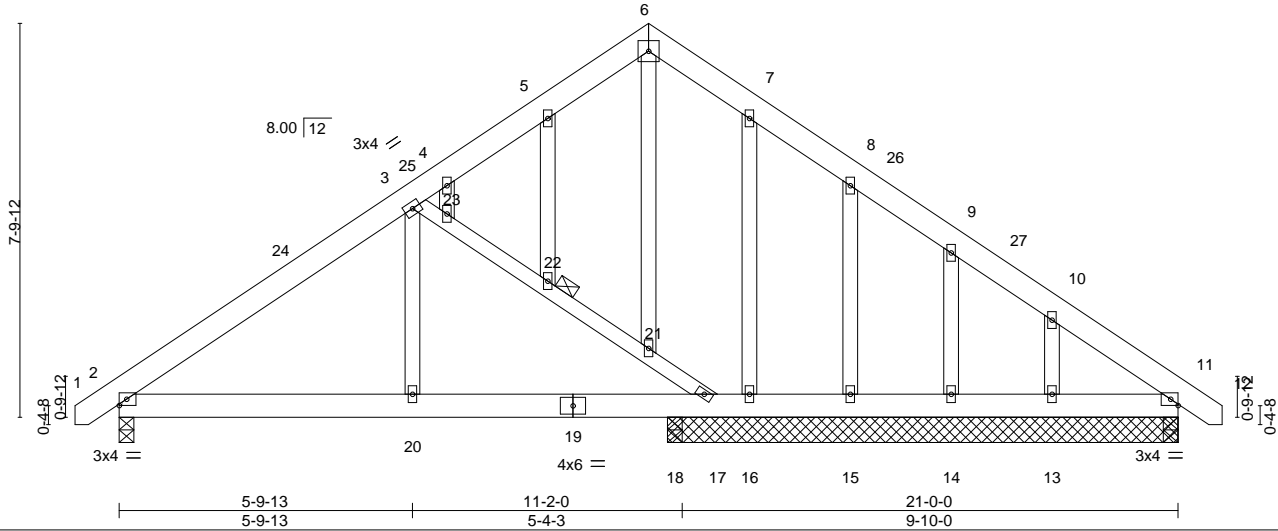
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:02 2023 Page 1

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5x5 =

Scale = 1:45.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.01 2-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02 2-20	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01 2-20	>999	240	Weight: 166 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 22

**REACTIONS.** All bearings 10-1-8 except (jt=length) 2=0-3-8, 11=0-3-8, 11=0-3-8, 18=0-3-8.  
 (lb) - Max Horz 2=225(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 16, 14, 11 except 2=-116(LC 12), 17=-164(LC 13), 15=-104(LC 13), 13=-142(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 16, 15, 14, 13, 11, 11 except 2=568(LC 1), 18=256(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-634/96, 10-11=-267/123  
 BOT CHORD 2-20=-122/548, 18-20=-121/550, 17-18=-121/550  
 WEBS 3-23=-510/251, 22-23=-487/233, 21-22=-506/249, 17-21=-503/242

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 10-6-0, Exterior(2) 10-6-0 to 14-10-13, Interior(1) 14-10-13 to 21-8-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14, 11 except (jt=lb) 2=116, 17=164, 15=104, 13=142.



June 23, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



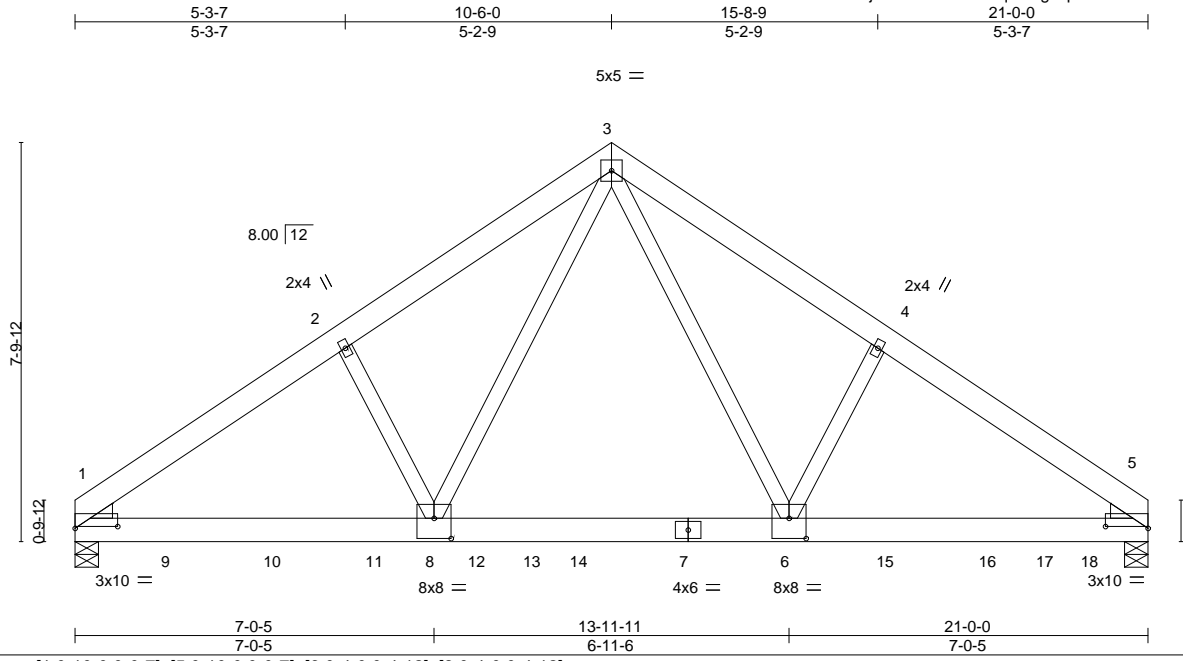
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss C2	Truss Type COMMON GIRDER	Qty 1	Ply 2	4310 Carthage Road West End Job Reference (optional)	I59129395
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:03 2023 Page 1

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Scale = 1:45.1

Plate Offsets (X,Y)--	[1:0-10-0,0-0-7], [5:0-10-0,0-0-7], [6:0-4-0,0-4-12], [8:0-4-0,0-4-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.10	5-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.17	5-6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.32	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	5-6	>999		
								Weight: 289 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-5-8, 5=0-5-8  
Max Horz 1=-175(LC 25)  
Max Uplift 1=-348(LC 8), 5=-455(LC 9)  
Max Grav 1=3311(LC 1), 5=3953(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-4326/478, 2-3=-4175/538, 3-4=-4380/578, 4-5=-4527/517  
BOT CHORD 1-8=-402/3424, 6-8=-209/2453, 5-6=-356/3603  
WEBS 3-6=-370/2613, 4-6=-262/265, 3-8=-293/2220, 2-8=-263/280

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=348, 5=455.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 499 lb down and 67 lb up at 1-10-4, 499 lb down and 67 lb up at 3-10-4, 499 lb down and 67 lb up at 5-10-4, 499 lb down and 67 lb up at 7-10-4, 499 lb down and 67 lb up at 9-10-4, 553 lb down and 85 lb up at 11-10-4, 553 lb down and 85 lb up at 13-10-4, 499 lb down and 67 lb up at 15-10-4, 499 lb down and 67 lb up at 17-10-4, and 510 lb down and 84 lb up at 18-11-12, and 510 lb down and 83 lb up at 19-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



June 23, 2023

Continued on page 2

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss C2	Truss Type COMMON GIRDER	Qty 1	Ply <b>2</b>	4310 Carthage Road West End I59129395 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:04 2023 Page 2  
ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-553(F) 6=-553(F) 9=-499(F) 10=-499(F) 11=-499(F) 12=-499(F) 14=-499(F) 15=-499(F) 16=-499(F) 17=-510(F) 18=-510(F)

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818 Soundside Road  
Edenton, NC 27932



Job J0623-3277	Truss D01	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	4310 Carthage Road West End I59129396
Comtech, Inc. Fayetteville, NC - 28314,					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

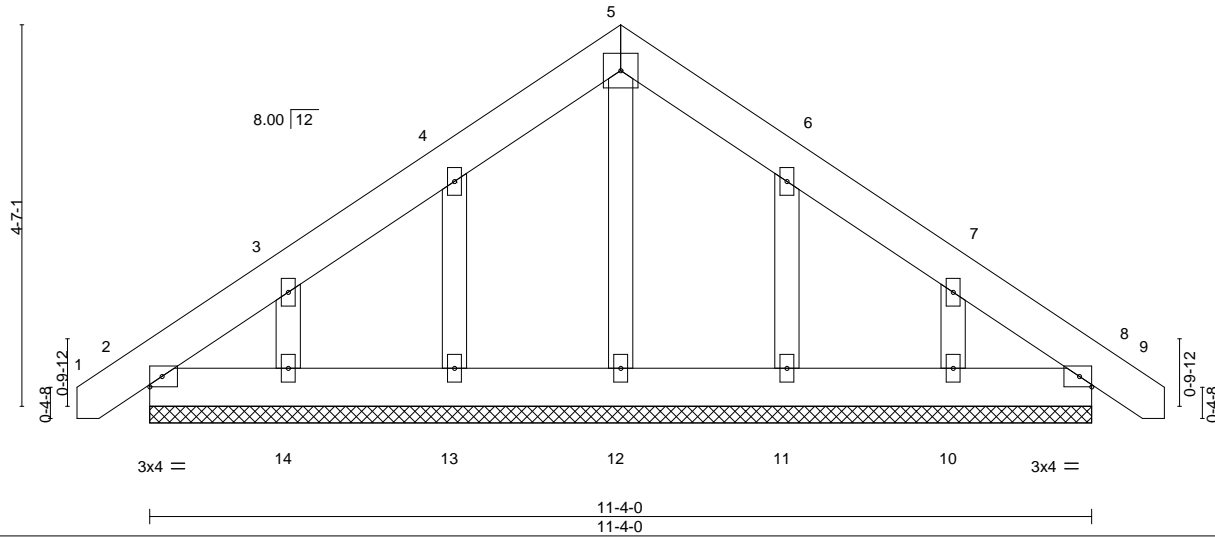
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:05 2023 Page 1

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5x5 =

Scale = 1:27.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 79 lb	FT = 20%

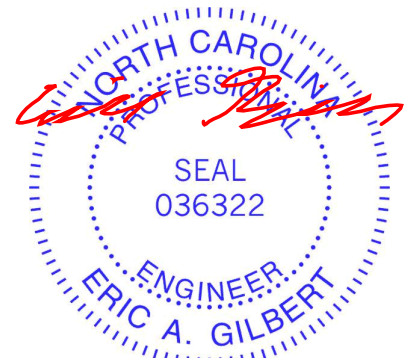
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-4-0.  
 (lb) - Max Horz 2=102(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-8-15 to 3-8-0, Exterior(2) 3-8-0 to 5-8-0, Corner(3) 5-8-0 to 10-0-13, Exterior(2) 10-0-13 to 12-0-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 11, 10.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



June 23, 2023

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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss G1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129397
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:07 2023 Page 1

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5x5 =

Scale = 1:44.5

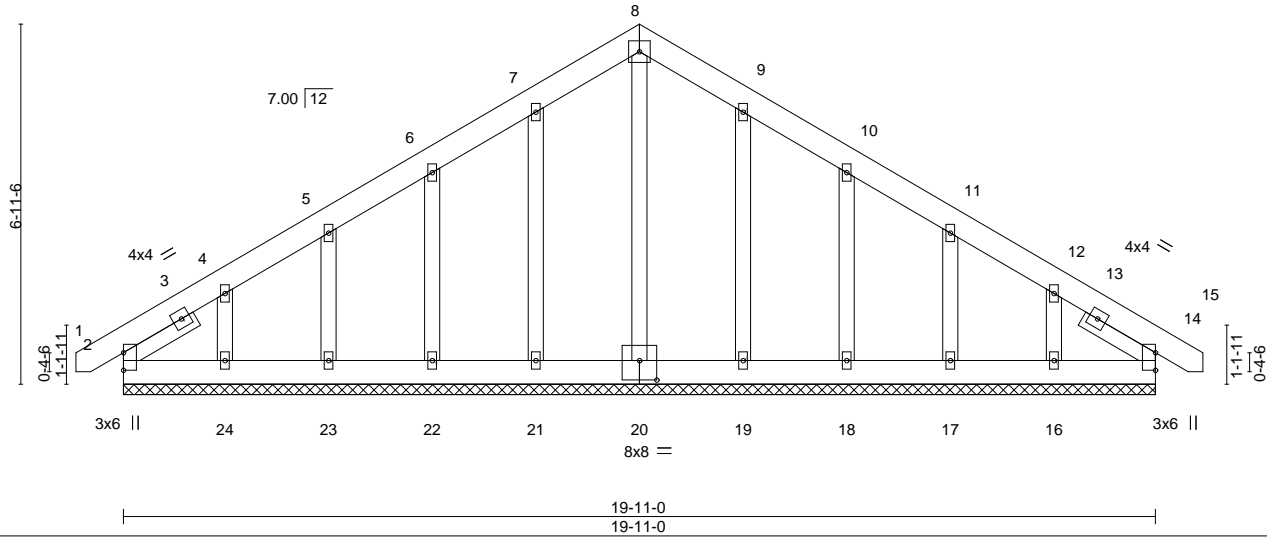


Plate Offsets (X,Y)--	[20:0-4-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00 14 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 14 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 157 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	
SLIDER Left 2x4 SP No.2 1-7-9, Right 2x4 SP No.2 1-7-9	

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 2--192(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 21, 22, 23, 19, 18, 17 except 24--143(LC 12), 16--128(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 14, 2, 20, 21, 22, 23, 24, 19, 18, 17, 16

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-5 to 3-7-8, Exterior(2) 3-7-8 to 9-11-8, Corner(3) 9-11-8 to 14-4-5, Exterior(2) 14-4-5 to 20-8-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 21, 22, 23, 19, 18, 17 except (jt=lb) 24=143, 16=128.



June 23, 2023

Job J0623-3277	Truss G2	Truss Type COMMON	Qty 5	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129398
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Comtech, Inc. Fayetteville, NC - 28314,

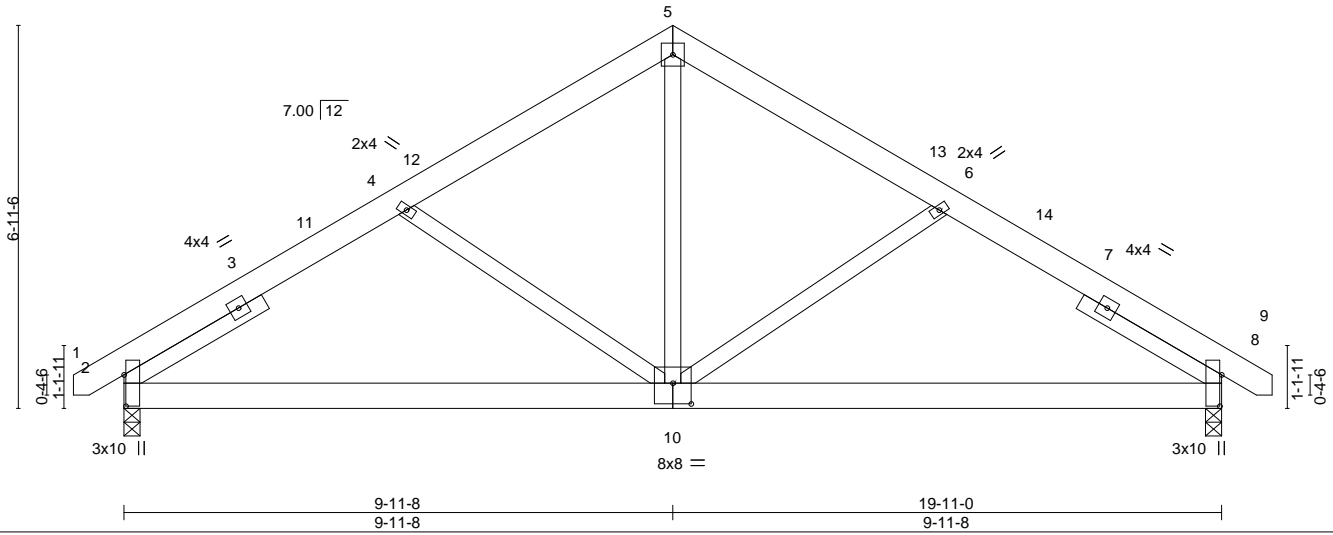
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:08 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:41.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.32	Vert(LL) -0.05 8-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.10 8-10 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 10 >999 240	Weight: 141 lb	FT = 20%

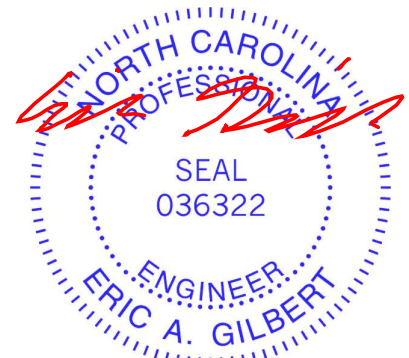
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 2-11-9, Right 2x4 SP No.2 2-11-9

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=-154(LC 8)  
 Max Uplift 8=-54(LC 13), 2=-54(LC 12)  
 Max Grav 8=843(LC 1), 2=843(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1075/272, 4-5=-833/229, 5-6=-833/229, 6-8=-1075/272  
 BOT CHORD 2-10=-144/840, 8-10=-139/817  
 WEBS 5-10=-71/522, 6-10=-263/185, 4-10=-263/185

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

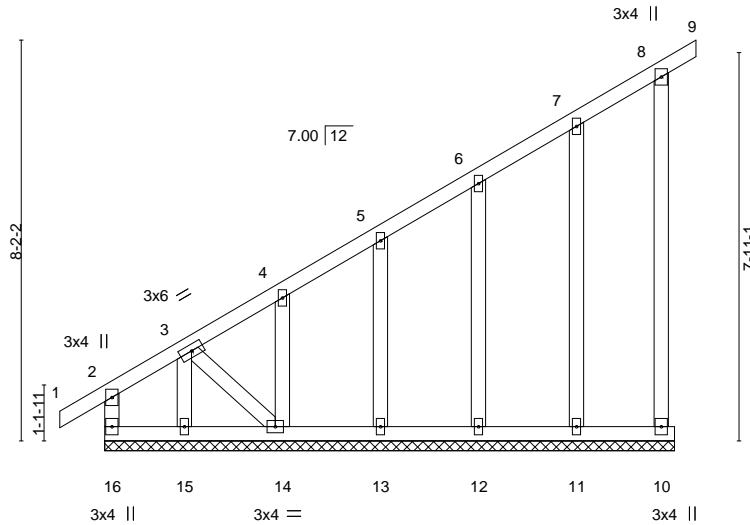
Job J0623-3277	Truss M1	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	4310 Carthage Road West End I59129399
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:09 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

-0-11-0 11-7-8 12-0-12  
0-11-0 11-7-8 0-5-4



Scale = 1:47.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 84 lb	FT = 20%

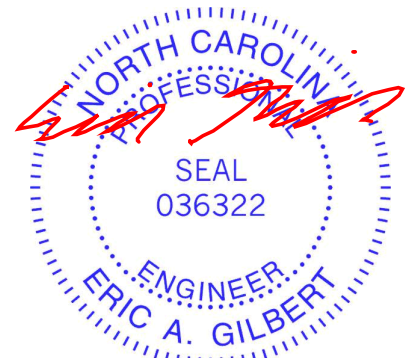
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 11-7-8.  
(lb) - Max Horz 16=240(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13, 15 except 14=202(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 11, 12, 13, 14, 15

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-313/247, 4-5=-253/198  
BOT CHORD 15-16=-293/224, 14-15=-293/224  
WEBS 3-15=-318/184, 3-14=-298/392

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-8-0, Exterior(2) 3-8-0 to 12-1-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12, 13, 15 except (jt=lb) 14=202.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



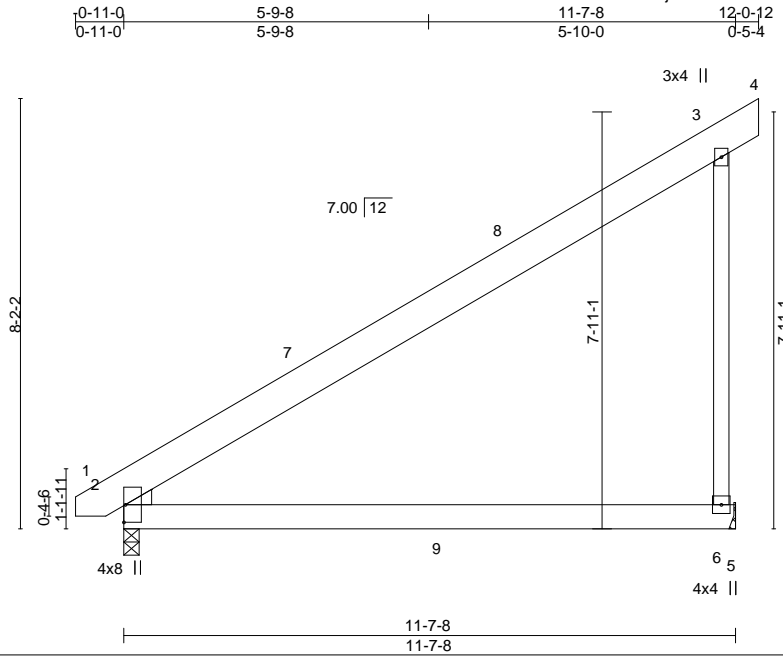
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss M2	Truss Type MONOPIITCH	Qty 5	Ply 1	4310 Carthage Road West End 159129400
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:11 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:43.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.47	Vert(LL)	-0.21	2-6	>652	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(CT)	-0.37	2-6	>365		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.06	2-6	>999		
	Code IRC2015/TPI2014						Weight: 85 lb	FT = 20%

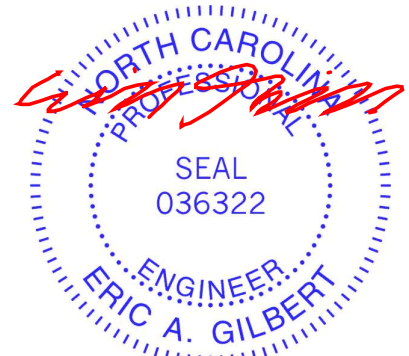
**LUMBER-**  
TOP CHORD 2x8 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
Max Horz 2=240(LC 12)  
Max Uplift 6=-137(LC 12)  
Max Grav 6=708(LC 19), 2=527(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-6=-437/288

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-1 to 3-9-12, Interior(1) 3-9-12 to 12-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=137.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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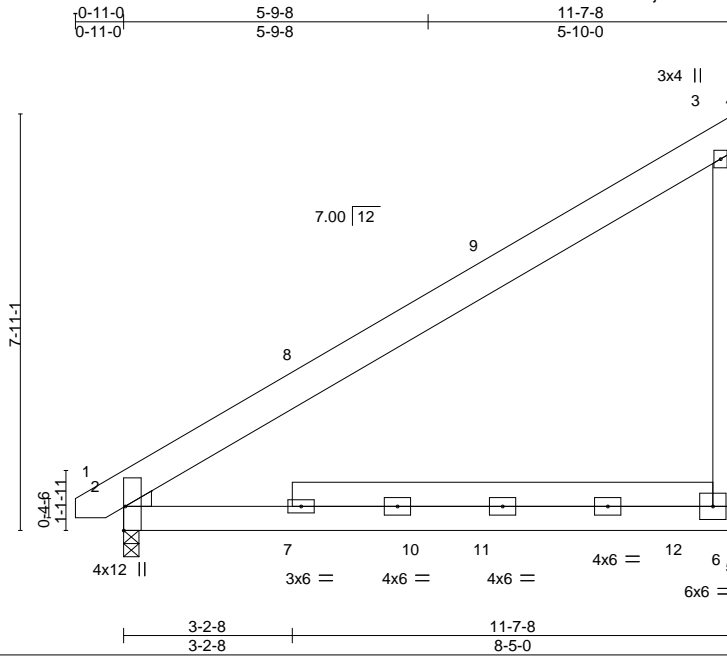
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss M2-P	Truss Type MONOPITCH	Qty 4	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129401
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:14 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:43.8

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.54	Vert(LL) -0.05 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.16 2-6 >858 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-6 >999 240	Weight: 102 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-7: 2x6 SP No.1	
WEDGE Left: 2x4 SP No.2	

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=233(LC 12)  
 Max Grav 6=793(LC 19), 2=575(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-6=-407/265

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-1 to 3-9-12, Interior(1) 3-9-12 to 11-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 200.0lb AC unit load placed on the bottom chord, 8-0-0 from left end, supported at two points, 5-0-0 apart.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.

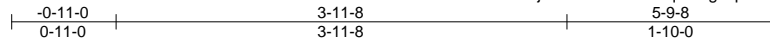


Job J0623-3277	Truss M2-S	Truss Type MONOPICH	Qty 4	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129402
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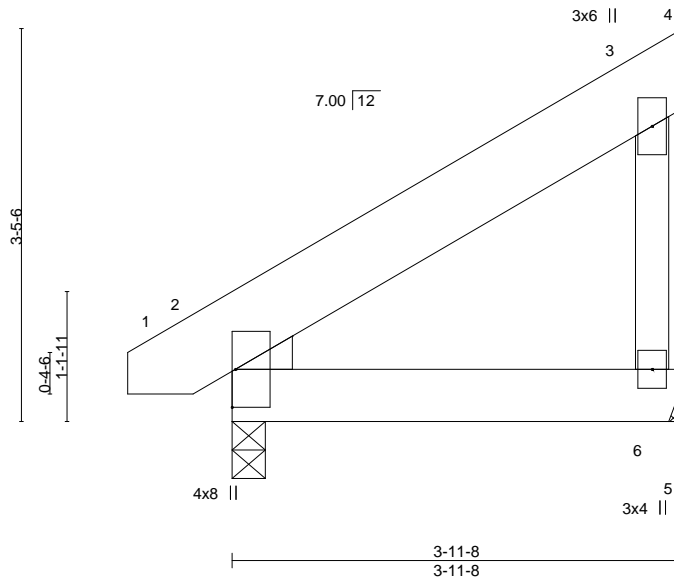
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:15 2023 Page 1

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Scale = 1:20.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240		
									Weight: 31 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x8 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2

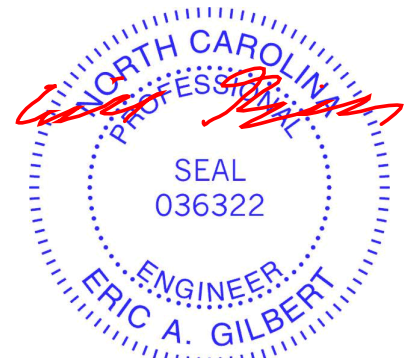
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
Max Horz 2=87(LC 12)  
Max Uplift 6=51(LC 12)  
Max Grav 6=163(LC 19), 2=193(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



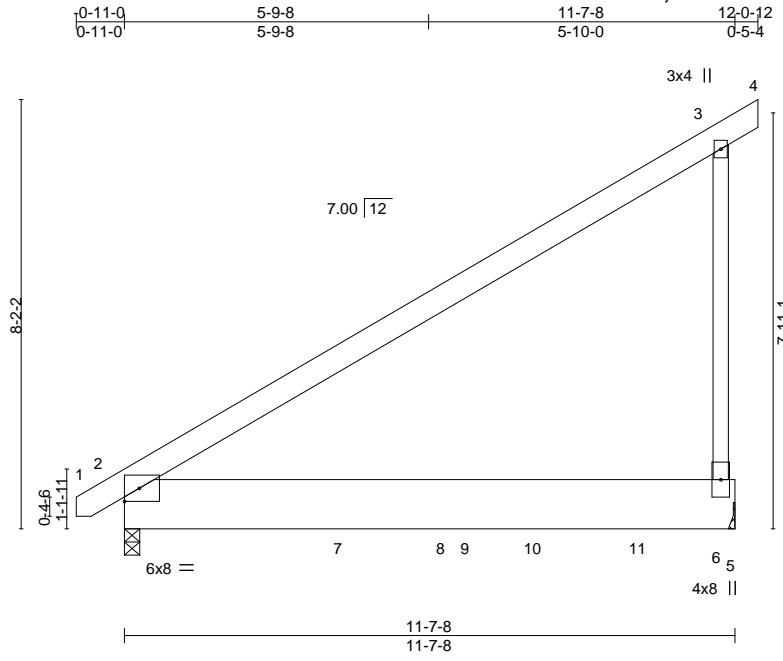
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss M2G	Truss Type MONOPIITCH	Qty 2	Ply 2	4310 Carthage Road West End I59129403
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:12 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:43.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.14	2-6	>942	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.29	2-6	>462		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.11	2-6	>999	Weight: 201 lb	FT = 20%

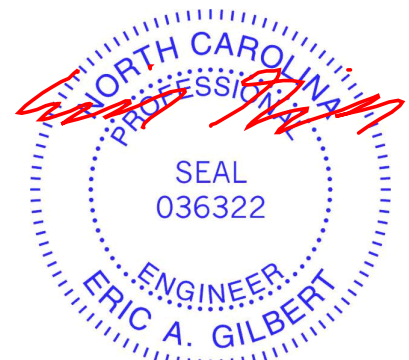
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x12 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=241(LC 8)  
 Max Uplift 6=-324(LC 8), 2=-262(LC 8)  
 Max Grav 6=2930(LC 2), 2=3209(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-6=-372/167

- NOTES-**
- 2-ply truss to be connected together as follows:  
 Top chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x12 - 2 rows staggered at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - N/A
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=324, 2=262.

Continued on page 2



June 23, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0623-3277	Truss M2G	Truss Type MONOPITCH	Qty 2	Ply <b>2</b>	4310 Carthage Road West End I59129403 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:12 2023 Page 2  
ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

**NOTES-**

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3036 lb down and 322 lb up at 4-2-4, 461 lb down at 6-1-12, and 461 lb down at 7-9-12, and 461 lb down at 9-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-3=-60, 3-4=-60, 2-5=-140(F=-120)
- Concentrated Loads (lb)
  - Vert: 7=-3000(B) 8=-111(F) 10=-111(F) 11=-111(F)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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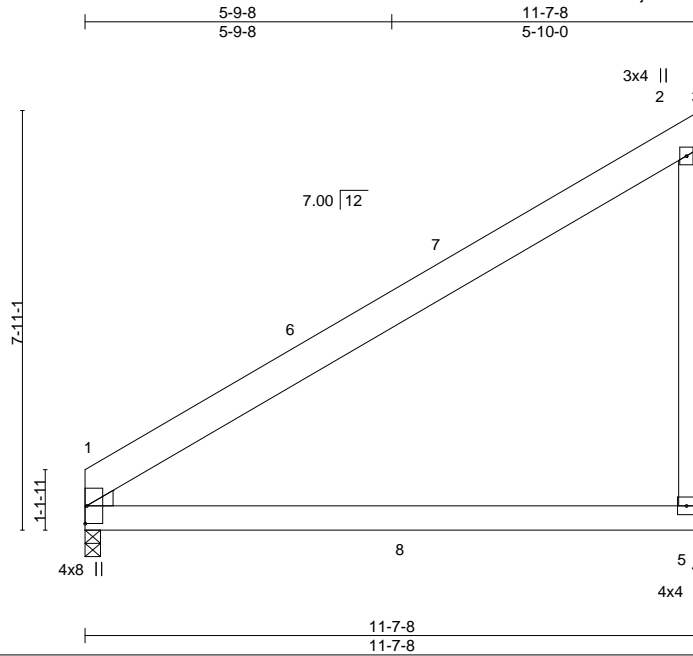
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss M3	Truss Type MONOPIITCH	Qty 5	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129404
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:16 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8I8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?#



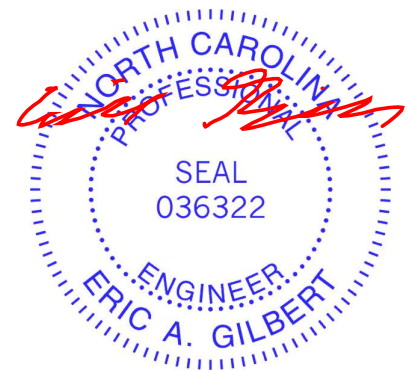
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.47	Vert(LL)	-0.21	1-5	>628	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(CT)	-0.38	1-5	>353		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.05	1-5	>999		
	Code IRC2015/TPI2014						Weight: 80 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
WEDGE	
Left: 2x4 SP No.2	

**REACTIONS.** (size) 5=Mechanical, 1=0-3-8  
 Max Horz 1=238(LC 12)  
 Max Uplift 5=-126(LC 12)  
 Max Grav 5=675(LC 19), 1=485(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-411/272

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-4 to 4-7-1, Interior(1) 4-7-1 to 11-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=126.



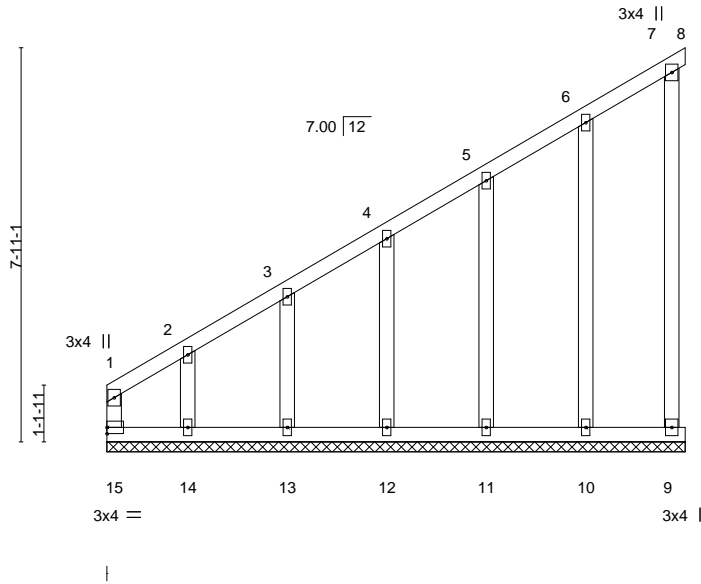
Job J0623-3277	Truss M4	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129405
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:17 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f  
11-7-8  
11-7-8

Scale = 1:46.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.03	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 78 lb	FT = 20%

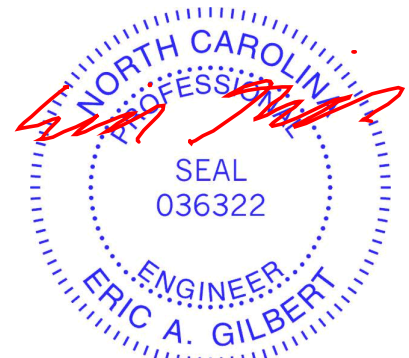
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-7-8.  
(lb) - Max Horz 15=218(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 15, 8, 9, 10, 11, 12, 13 except 14=227(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11, 12, 13, 14 except 15=279(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-15=-263/197, 1-2=-401/332, 2-3=-280/233

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) 0-2-4 to 4-7-1, Exterior(2) 4-7-1 to 11-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 8, 9, 10, 11, 12, 13 except (jt=lb) 14=227.



June 23, 2023

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss M5	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End 159129406
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:18 2023 Page 1

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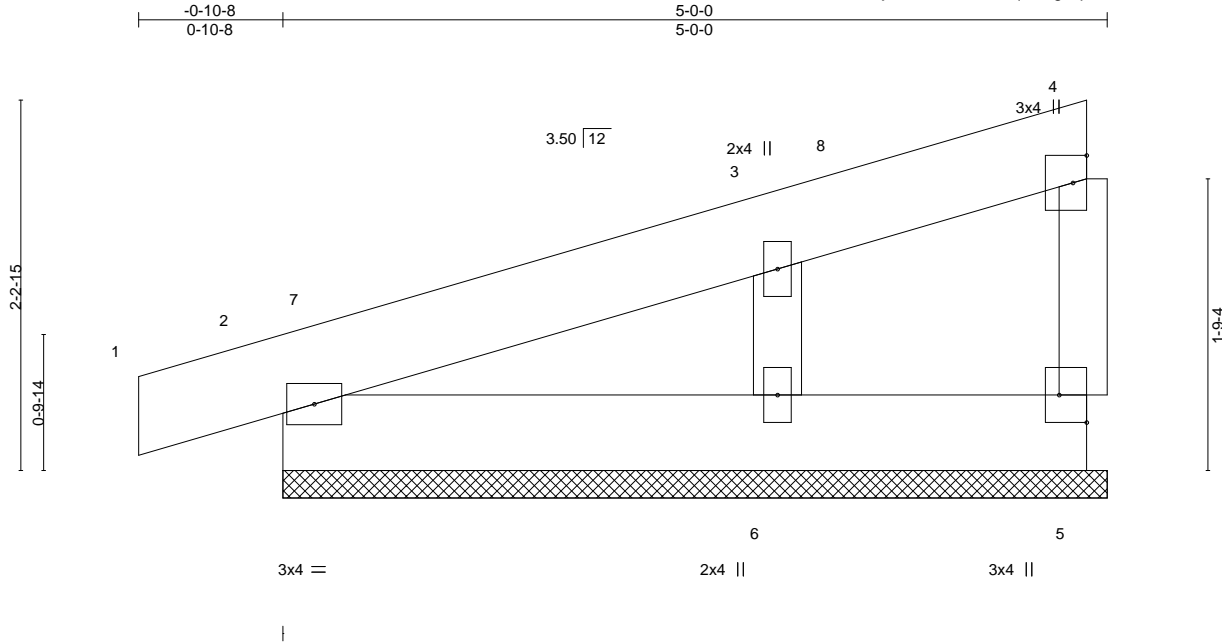


Plate Offsets (X,Y)--		[5:Edge,0-2-0]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 29 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		
OTHERS	2x4 SP No.2		

**REACTIONS.** (size) 5=5-0-0, 2=5-0-0, 6=5-0-0  
 Max Horz 2=55(LC 12)  
 Max Uplift 5=7(LC 8), 2=32(LC 8), 6=39(LC 12)  
 Max Grav 5=40(LC 1), 2=161(LC 1), 6=237(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-173/325

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 4-9-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

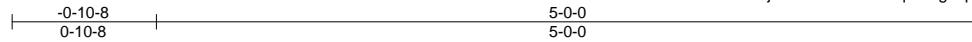


Job J0623-3277	Truss M6	Truss Type MONOPIITCH	Qty 5	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129407
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:19 2023 Page 1

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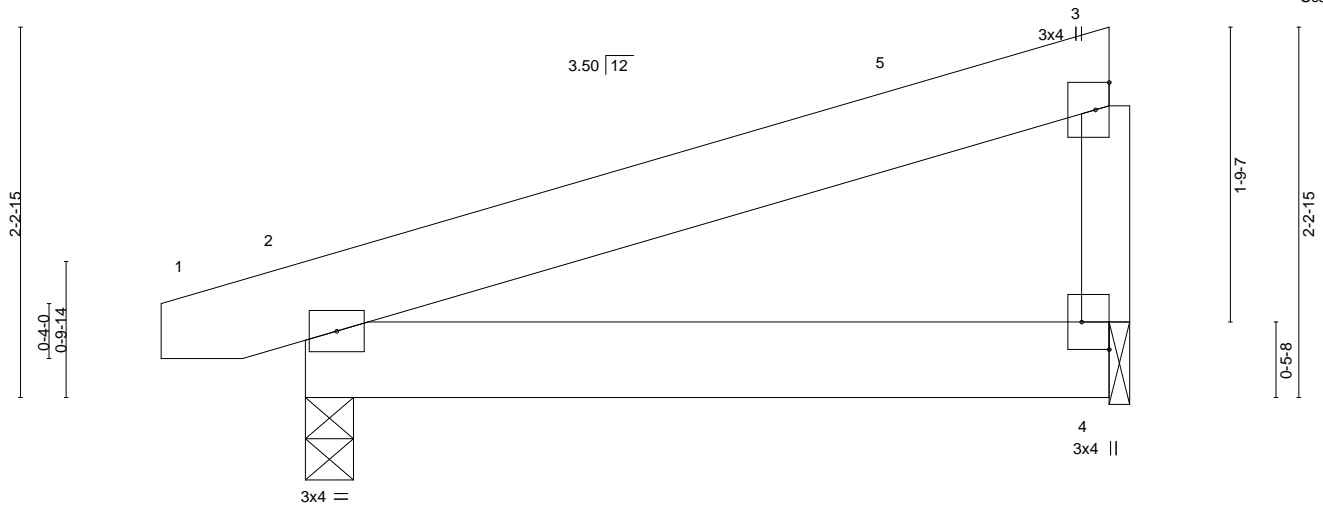


Plate Offsets (X, Y)-- [4:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.01	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.01	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	Weight: 28 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

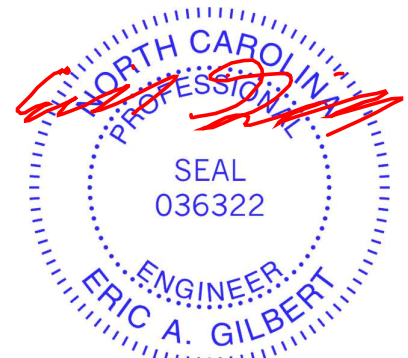
**REACTIONS.**

(size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=53(LC 12)  
 Max Uplift 2=-40(LC 8), 4=-29(LC 12)  
 Max Grav 2=239(LC 1), 4=182(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 4-9-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



June 23, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss M7	Truss Type MONOPICH	Qty 5	Ply 1	4310 Carthage Road West End 159129408
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:20 2023 Page 1

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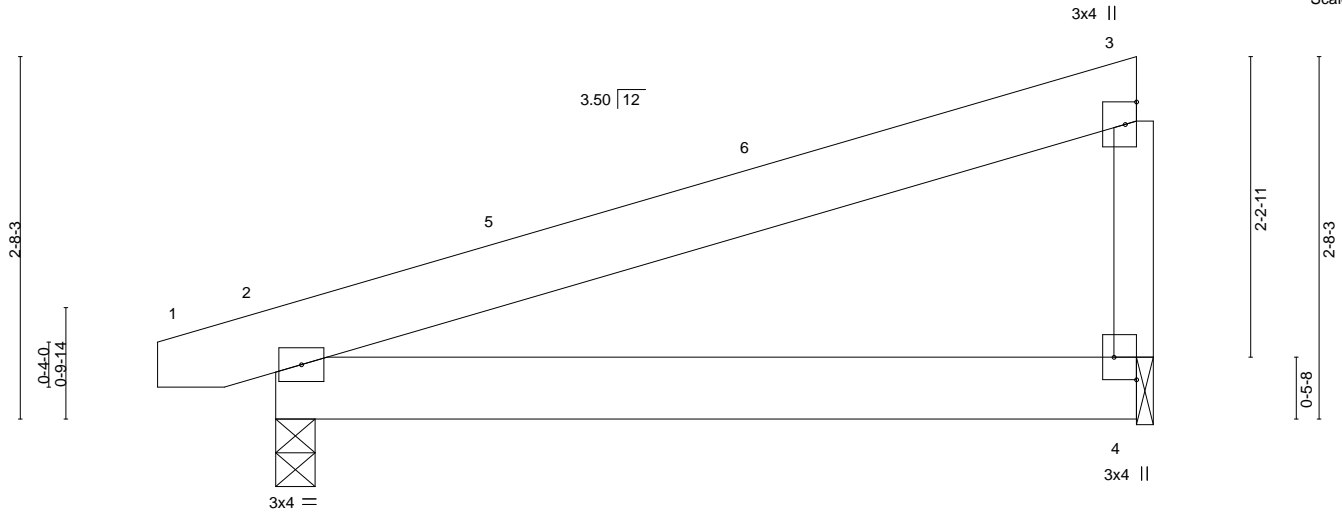


Plate Offsets (X,Y)-- [4:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.02	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.04	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 35 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

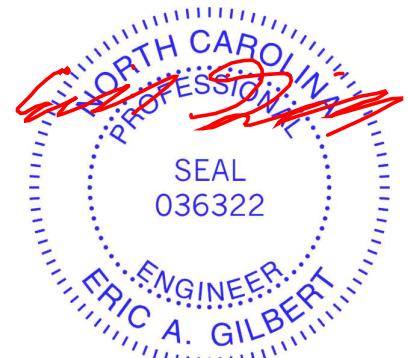
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=67(LC 12)  
 Max Uplift 2=-44(LC 8), 4=-38(LC 12)  
 Max Grav 2=298(LC 1), 4=243(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 6-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



June 23, 2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



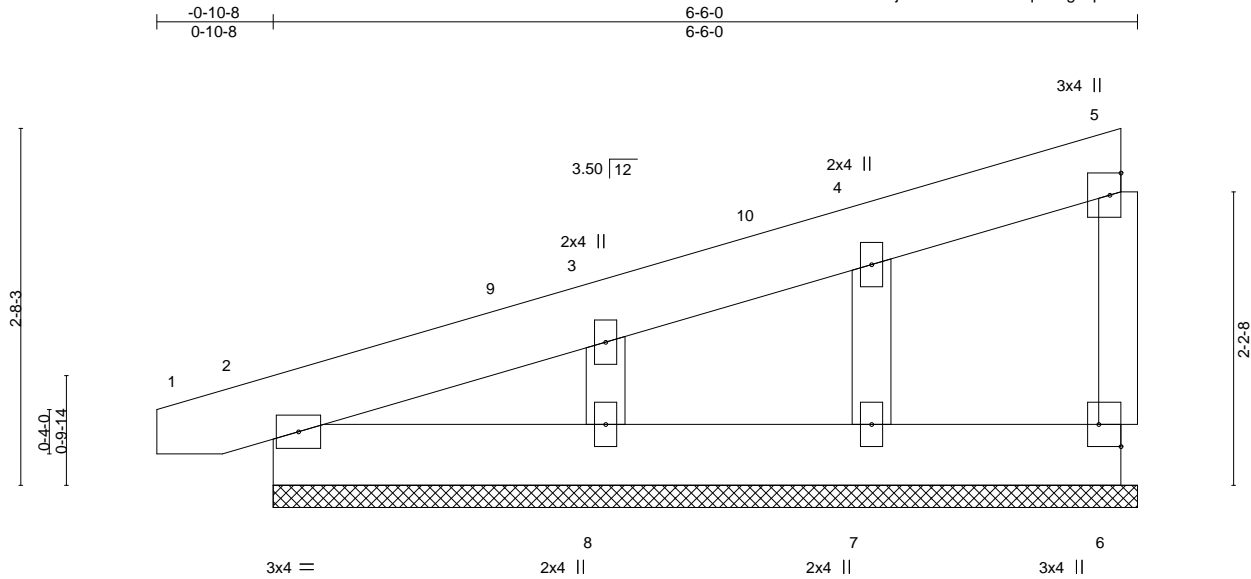
818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss M8	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	159129409
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:21 2023 Page 1

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Scale = 1:17.3

Plate Offsets (X,Y)-- [6:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
								Weight: 38 lb	FT = 20%	

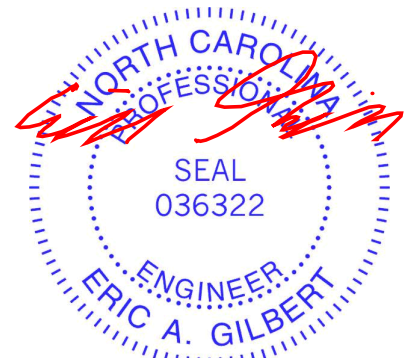
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 6-6-0.  
 (lb) - Max Horz 2=96(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8  
 Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-8=-150/266

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-7-9 to 3-9-4, Exterior(2) 3-9-4 to 6-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7, 8.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



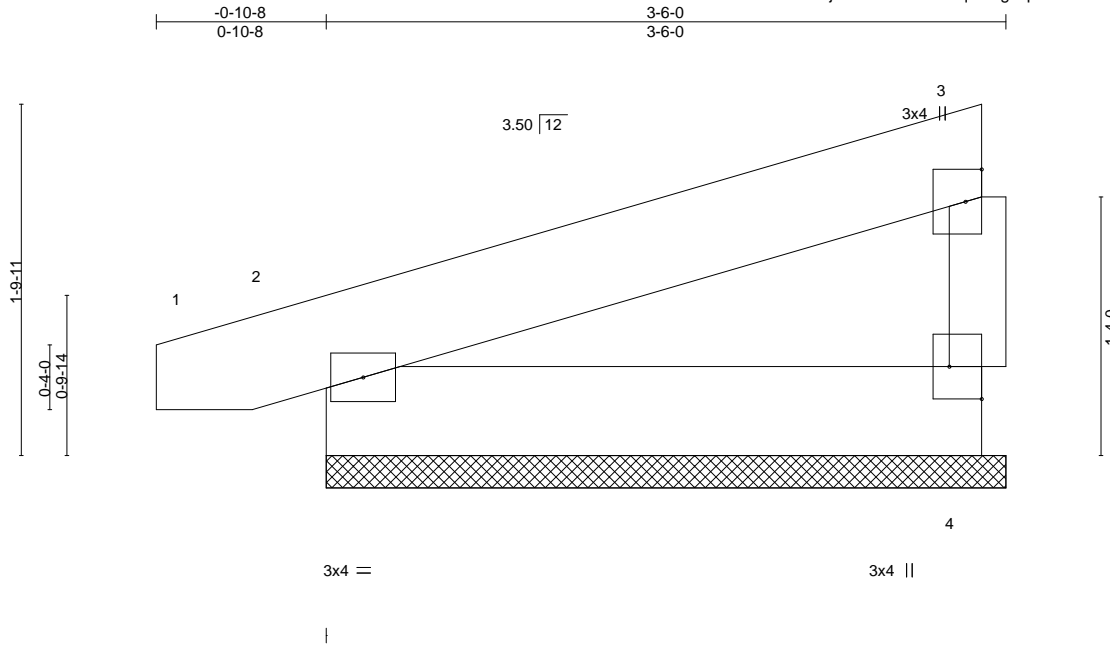
818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss M9	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129410
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:22 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:11.9

Plate Offsets (X,Y)--		[4:Edge,0-2-0]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 20 lb	FT = 20%

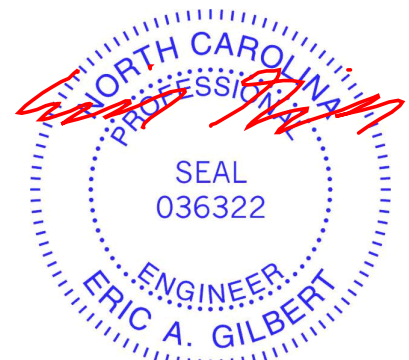
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

**REACTIONS.** (size) 4=3-6-0, 2=3-6-0  
 Max Horz 2=39(LC 12)  
 Max Uplift 4=-21(LC 12), 2=-31(LC 8)  
 Max Grav 4=128(LC 1), 2=175(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



June 23, 2023



Job J0623-3277	Truss M10	Truss Type MONOPICH	Qty 9	Ply 1	4310 Carthage Road West End I59129411
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:10 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



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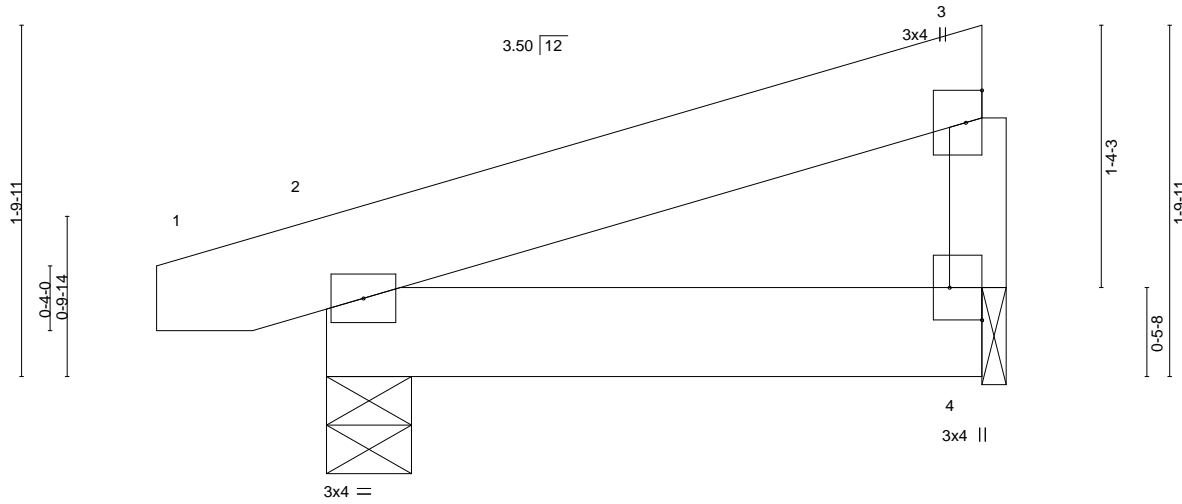


Plate Offsets (X, Y)-- [4:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240		
									Weight: 20 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

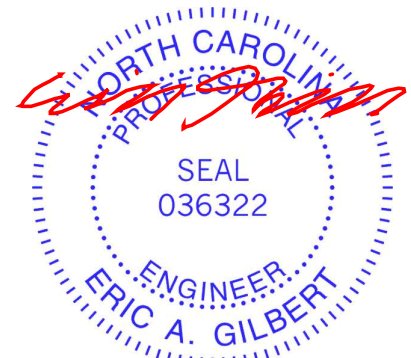
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-5-4, 4=0-1-8  
Max Horz 2=39(LC 12)  
Max Uplift 2=-39(LC 8), 4=-20(LC 12)  
Max Grav 2=183(LC 1), 4=116(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



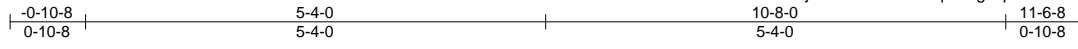
818 Soundside Road  
Edenton, NC 27932

Job J0623-3277	Truss P1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End Job Reference (optional)	I59129412
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:23 2023 Page 1

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5x5 =

Scale = 1:26.7

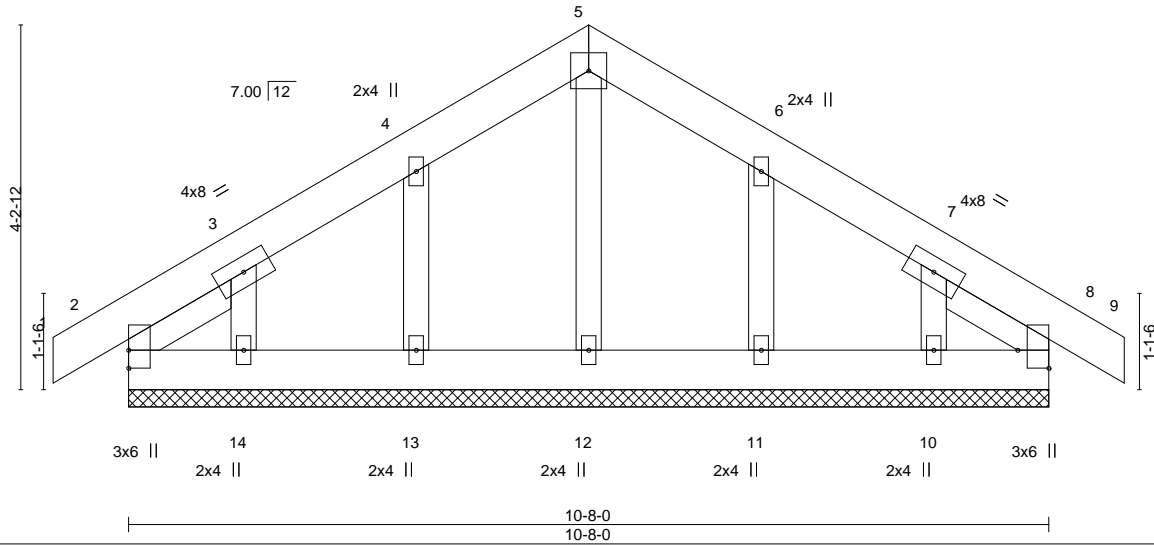


Plate Offsets (X, Y)--	[8:Edge,0-4-5]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 78 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 1-5-4, Right 2x4 SP No.2 1-5-4		

**REACTIONS.** All bearings 10-8-0.  
 (lb) - Max Horz 2--89(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-4-0, Exterior(2) 3-4-0 to 5-4-0, Corner(3) 5-4-0 to 9-8-13, Exterior(2) 9-8-13 to 11-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.



June 23, 2023

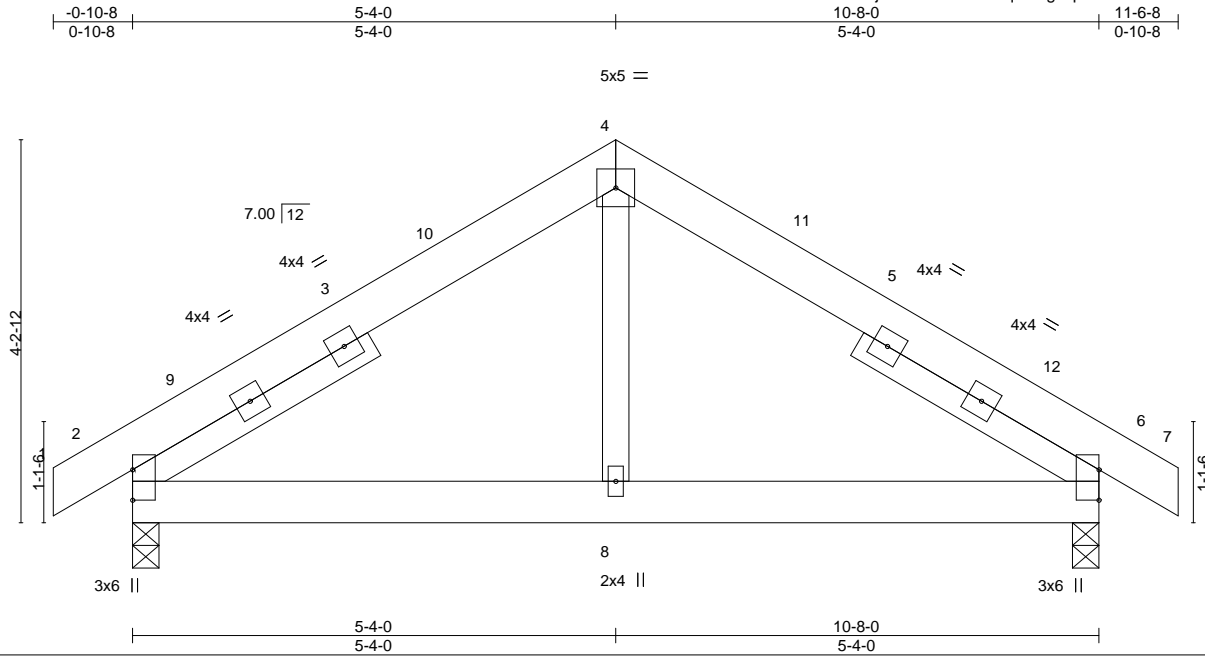
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job J0623-3277	Truss P2	Truss Type Common	Qty 4	Ply 1	4310 Carthage Road West End 159129413
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:24 2023 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.01 6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01 6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.00 2-8	>999	240		
								Weight: 74 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x4 SP No.2 3-0-13, Right 2x4 SP No.2 3-0-13	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-89(LC 8)  
 Max Uplift 2=-35(LC 12), 6=-35(LC 13)  
 Max Grav 2=479(LC 1), 6=479(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-504/147, 4-6=-504/147  
 BOT CHORD 2-8=-17/333, 6-8=-17/333

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-4-0, Exterior(2) 5-4-0 to 9-8-13, Interior(1) 9-8-13 to 11-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

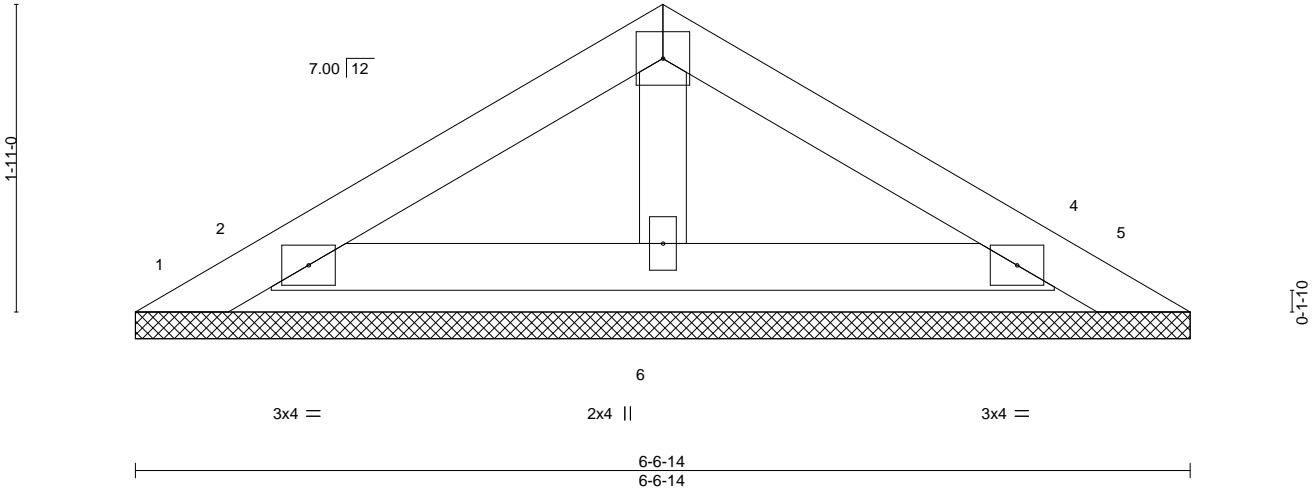
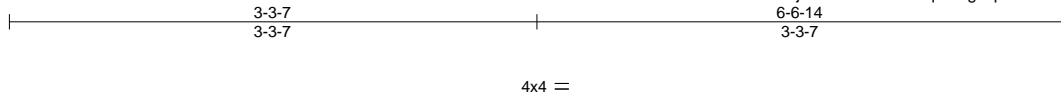


Job J0623-3277	Truss PBA1	Truss Type GABLE	Qty 1	Ply 1	4310 Carthage Road West End I59129414
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:25 2023 Page 1

ID:3ZkAT1H?TWmBdJQ8l8CHLxz8j5Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

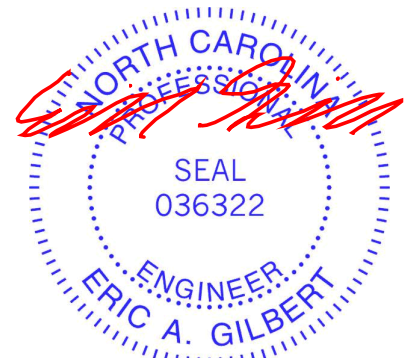
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 6-6-14.  
 (lb) - Max Horz 1=52(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 2=123(LC 12), 4=112(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 2=123, 4=112.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job J0623-3277	Truss PBA2	Truss Type GABLE	Qty 4	Ply 1	4310 Carthage Road West End 159129415
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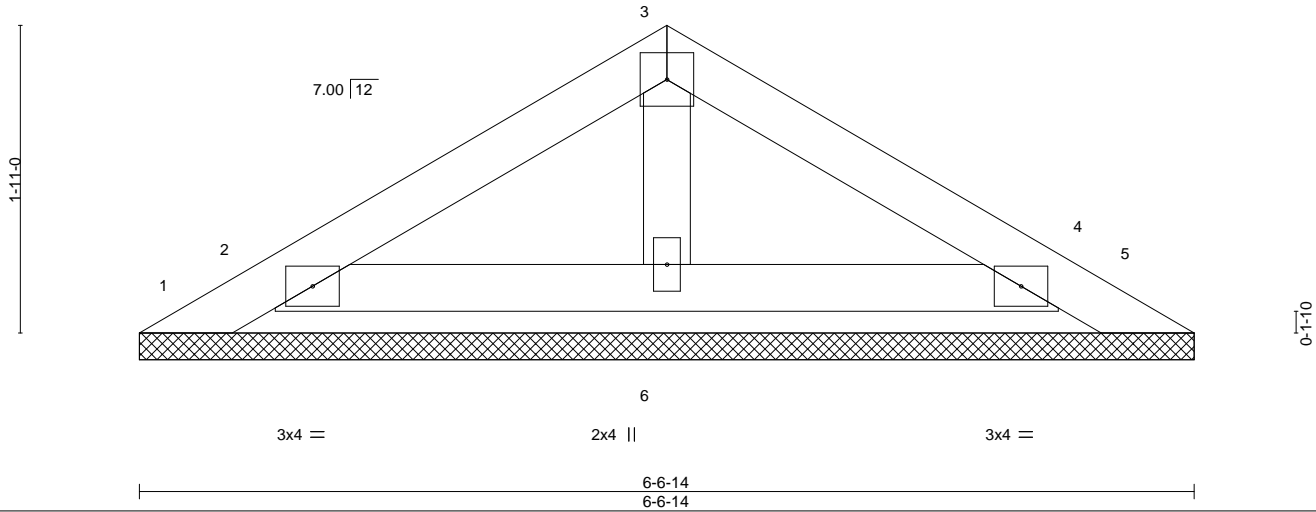
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 22 13:43:27 2023 Page 1

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Scale = 1:14.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%

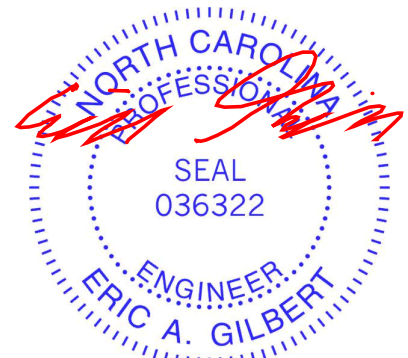
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 6-6-14.  
 (lb) - Max Horz 1=42(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



June 23, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

4 X 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.